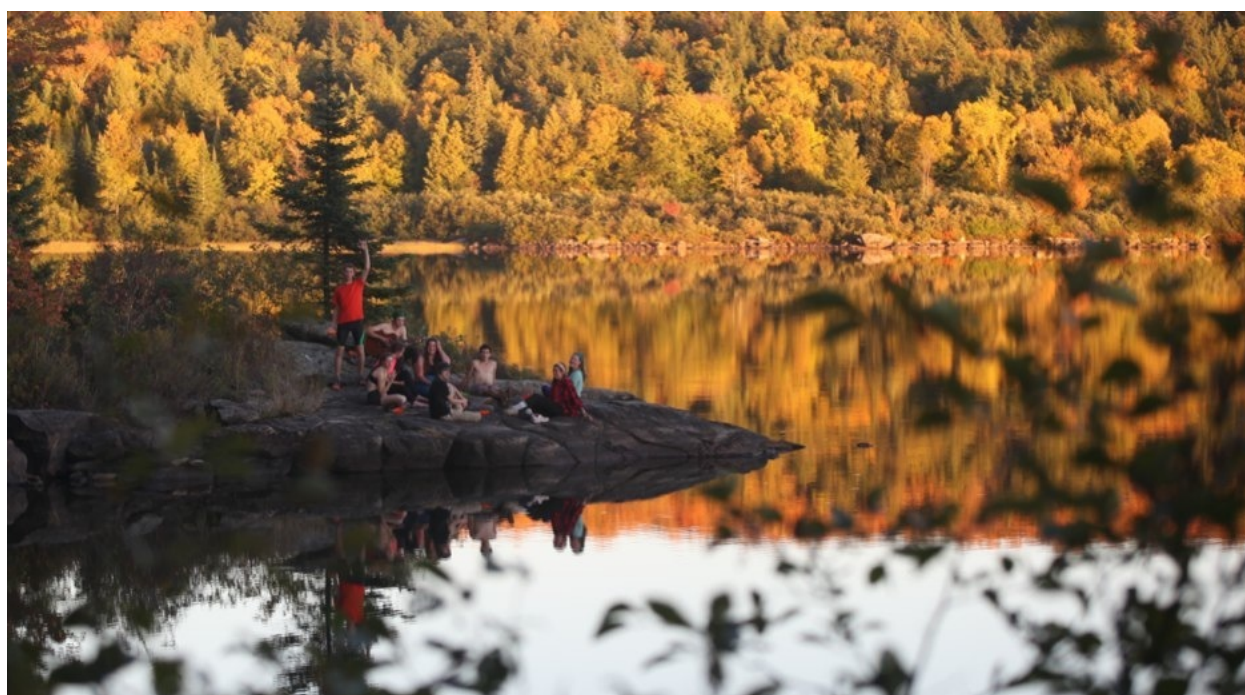


# ***JOURNEYS into RELATION***

**Vignettes of OEE-based  
Integrated Curriculum Programs  
in Ontario Secondary Schools**



## **Teacher Stories**

*Volume 1*



**The Council of Outdoor  
Educators of Ontario**

**Edited by Grant Linney**

## *JOURNEYS into RELATION*



The Council of Outdoor  
Educators of Ontario  
[www.coeo.org](http://www.coeo.org)

The Council of Outdoor Educators of Ontario is a non-profit, volunteer-based organization that promotes safe and high quality outdoor education experiences for people of all ages. It also acts as a professional body for outdoor educators in Ontario. These aims are achieved through producing Pathways: The Ontario Journal for Outdoor Education as well as an electronic newsletter and occasional publications such as this one. COEO also runs an annual conference and regional workshops as well as maintaining a website, and collaborating with kindred organizations as well as government agencies.

COEO believes that the direct, hands-on experiences of outdoor education provide the following powerful and lasting benefits:

1. Education for Environment
2. Education for Character
3. Education for Well Being
4. Education for Curriculum & Community

For a more detailed description of these values, please visit <http://www.coeo.org/values.html>

### ***Journeys Into Relation:***

#### ***Vignettes of OEE-based Integrated Curriculum Programs in Ontario Secondary Schools***

Thanks to our contributing authors, from New Liskeard to Dunnville,  
Wiarton to Kingston, and many points in between.

**Editing & Layout: Grant Linney**

*With a special thanks to Mark Whitcombe for his significant additional help.*

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## Preface

In an excellent video available on YouTube entitled *Symphony of Science*, four great scientists – Richard Feynman theoretical physicist, Neil de Grasse Tyson astrophysicist, Carl Sagan, another astrophysicist, and, finally, “Bill Nye the Science Guy” — combine their expansive knowledge of everything from single cells to the universe as a whole with a deep passion for the essence of existence which they repeatedly convey in three simple but powerful words, “*It’s all connected.*” What makes this video all the more powerful is that its creator has extended the energy and knowledge of these four boyish geniuses by having them “sing” their words. I never tire of watching and listening to this piece.

If you consider the parallel words of modern day author, speaker and spiritual activist Parker Palmer, it turns out that science and philosophy are not that far apart when it comes to such statements. “*To be is to be in relation,*” Palmer says. For me, this is a touchstone observation and, as an educator, one of the most profound insights I can share with those who spend time with me.

Bert Horwood’s main title for the last article gracing this publication is *Energy and Knowledge*. I believe that outdoor experiential education, particularly as it is expressed in Ontario high school multi-credit integrated programs, is one of the most powerful and needed antidotes to these crisis times of disconnection and disengagement. And, within these pages are found the energy and knowledge (or, in my words, the passion and talent) of 18 Ontario practitioners of these transformational programs. Join with me in listening to, seeing images of and relishing their stories. Join with me in celebrating the great diversity of students, grade levels, subject areas, and means of engagement that these programs entail. Join with me in acknowledging the crucial importance of the core messages of these programs.

### A Collection of Perspectives

The template at the beginning of every program article conveys a lot of information in a limited space as well as providing a useful collection of similarities and differences between the programs.

We teach who we are. We write who we are. Read these stories and meet a wide variety of remarkable and dedicated practitioners. What formative moments brought them to these transformational endeavours? How are their passions and talents reflected in the unique and powerful programs they run?

Note the exceptions to the rule: a Toronto independent school that capitalizes on its urban landscape; a small rural K-12 school that offers no multi-credit course packages but whose commitment to all-school OEE deserves attention in this publication.

Note the great variety of meaningful and highly productive community partnerships that are central to these programs.

Note the number of teachers who speak glowingly of the positive impact of having high school students assume teaching roles with younger pupils.

Note the progression that each program takes its students through over a semester and, in some cases, longer periods of time. These truly are journeys of self-discovery.

Note the insightful quotes from many students and parents. An extended piece from one student who subsequently became a co-op student is also included.

The last two articles are more theoretical pieces that have previously been published in COEO’s *Pathways: The Ontario Journal of Outdoor Education*. Their insights add depth to the other pieces.

Grant Linney  
June 1, 2014

## **Community Environmental Leadership Program (CELP) and Headwaters**

*Guelph C.V.I., Upper Grand District School Board*

**By Katie Gad**

Program Website:	www.celp.info
Target Size of Group:	24 students per class
Nature of Students:	Mixed but mostly academic and leadership students
First Year Offered:	CELP 1995      Headwaters 2006
Time of Year Offered:	Both semesters
Time of Day Offered:	Daily, full day
Frequency:	Usually two classes per semester
Programs Location:	Camp Edgewood, Eden Mills
Home School Population:	1570
Other Schools:	John F. Ross C.V.I., Centre Wellington C.V.I.
Total School Populations:	6,147
Additional Course Fee:	CELP \$600      Headwaters \$750

### **Credits offered:**

#### **Grade 10 CELP**

- ENG 2DK: English (Academic) or ENG 2PK English (Applied),
- GLC 20K: Career Studies
- CHV 20K: Civics
- PAD 20K: Physical Education: Outdoor Activities,
- IDP 30K: Interdisciplinary Studies

#### **Grade 12 Headwaters**

- ENG 4UK: English (University)
- PAD 40K: Physical Education: Outdoor Activities
- IDP 40K/4UK: Interdisciplinary Studies,
- CGR 4MK: Environment and Resource Management

### **Major Outdoor Experiences:**

#### **Grade 10 CELP**

- 5-day canoe trip on Magnetawan River or 5-day traditional winter camping trip in Algonquin Park
- Teaching Grade 5 Earthkeepers Program
- Week-long biking unit

#### **Grade 12 Headwaters**

- 6-day Algonquin canoe trip with old growth visit or 6-day traditional winter camping trip
- Running a maple syrup operation
- Planting and harvesting an organic garden and greenhouse
- Sunrise to sunset or overnight solo
- Local hikes and paddles

### **Leadership Opportunities:**

#### **Grade 10 CELP**

- Teaching Earthkeepers to Grade 5 students
- Planning and implementing an “active citizenship day”

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### **Grade 12 Headwaters**

- Planning and implementing a harvest (fall) or maple syrup (spring) festival.
- Planning and implementing a grade 7/8 “Waterways” program.
- Class project to present a vision for a “resilient Guelph” to the community.

### **Other Key Elements:**

- Many volunteers help to make the program possible (e.g. teaching paddle making, moccasin making, building greenhouse and garden boxes, guiding trips)
- Partnerships to make elementary programs work, e.g., with the City of Guelph and GRCA (Grand River Conservation Authority) for Waterways

### **Major Challenges:**

- Staffing units not being transferred from schools sending students.
- Increase in Interdisciplinary programs within school board makes it hard for students to do “everything” and same pool of students is choosing between programs.

### **Integration of Specialist High Skills Majors:**

- Many of the skills for the Environment SHSM are taught, but it’s not formally included.



## A Journey to the Heart of Experiential Education

In 2009, Mike Elrick founder of the CELP and Headwaters Programs suddenly died of lung cancer at the age of 45. He had been a healthy and active non-smoker. Students who had been taught by Mike in his semester-long programs gathered in small groups at the guidance office. Grief counsellors provided by the board remarked that, unlike other situations they'd dealt with, these students didn't need them: they supported each other through this loss by recounting stories about Mike's mentorship and teaching, singing songs, and hugging. This seems to me the most important legacy of Mike and the programs he created: they connect students to each other and the world ... and make them part of a community that cares for each other and for the planet.

The Community Environmental Leadership Programs (Grade 10 CELP and Grade 12 Headwaters) are four-credit, semester-long interdisciplinary environmental leadership programs based at Centennial Collegiate in Guelph. Students come from four different high schools within the board and apply to be in the program. We attract mostly leadership students but increasingly also cater to students whose learning style is not a good fit in a conventional classroom, or students who experience anxiety or mental health issues in a traditional school setting. Founded in 1995, CELP is the second longest-running interdisciplinary program in Ontario. Headwaters started in 2006.

As one of the current teachers of the Grade 12 Headwaters Program, I have been reflecting on something a student wrote in her journal:

*An important thing to me about the program is that it gives me the freedom to bring my heart into my education and, in doing so, I discover more about myself.*

In teacher's college, we learn about the importance of engaging the "head, heart and hands" in our lessons. In "regular school" (as the students call it), it seems we do a great job of teaching "head concepts"— facts and ways of thinking. In some classes, we teach the "hands" through skill development. Many of our students say they learned about issues we study in regular school but have "never cared before because it was all in the textbook." CELP and Headwaters are structured in a way that students are invited to "put their hearts" into their learning through direct experience.

In the fall semester, the programs start with a wilderness canoe trip on the Magnetawan River (CELP) or in Algonquin Park (Headwaters). In the winter semester, both classes snowshoe with sleds of gear and stay in wall tents heated with stoves. In the Grade 12 program, we carve paddles in the fall and make moccasins in the winter to reflect on the value and resource use of crafting our own usable items by hand. We are assisted in this by community resource people: Janet Ross has taught moccasin making to Headwaters students since the start of the program in 2006. On trips, students are often outside their comfort zone, away from friends and family and the comforts of home. This shared real experience fosters bonds in even the most unlikely groups and, upon return, barely a month into the program, numerous students inevitably comment, "this group is like family to me." The tangible tasks of the trip from portaging, cutting wood and cooking over a fire to working together to erect tents at -25°C. "work their magic on them," as Mike would say. Unlike team challenges manufactured in the school gym (which also serve their purpose), these are real tasks with real consequences and real rewards. Each individual's performance impacts the group (as the cook who added the



bag of salt instead of the bag of parmesan to the evening's pasta well knows).

Many of our students come from a background where camping or spending time at the cottage is part of their experience, but we also have students who are spending significant time outdoors for the first time. In one case, a student on a canoe trip commented about how comfortable she was in her rain gear; she went on to note that she had never been outside in the rain before.

No matter their background, the immersion in the natural beauty of a wilderness setting never fails to re-connect even the most experienced trippers with the "sense of wonder" Rachel Carson writes about. When he joined us for the Headwaters canoe trip last fall, Grant Linney billed this "Awe" we get from a wilderness experience as the first and most important step towards caring about the planet and taking action. Through being with a group of peers who are also there to appreciate the wild, depending on the land's resources through gathering wood and hauling water, and through time to reflect and observe in nature, the first step of the program is re-connecting students to the systems and beauty of the natural world.

When we return from our wilderness trips, our programs focus on some of our planet's most pressing environmental crises. We learn in and from the community around us. After a session on urban bike safety, the Grade 10s travel as a group to the site of Guelph's water source and our water treatment, visit our municipal garbage, compost and recycling facility, go to local conventional and organic farms, and interview a councillor at City Hall for Civics. As they bike from place to place for Phys. Ed., they also do research on civic engagement for Careers and learn debating skills in Interdisciplinary Studies and English.

In Headwaters, we follow up our Algonquin trip with a roundtable on the future of logging

in the park, role playing different perspectives and staging a debate-style decision making process followed by a consensus-driven "consultation" process to explore decision making around environmental issues. We then delve into learning about our fossil fuel dependent economy, climate change issues and conventional and alternative agricultural systems. While we are learning about these subjects, we grow our own food in a greenhouse and in raised beds. We look after chickens and learn how to reduce a home's energy footprint by winterizing a building. On Fridays, the students source, map, and cook a "locavore meal" for the class where the focus is on assessing and critiquing food kilometres as a method of measuring impact. The complexity of addressing the issue of how our food gets to our plates is paired with the simplicity and joy of sharing a meal together. Instead of the despair or disengagement students feel when they only learn about environmental crises, we attempt to engage in "active hope" by learning sustainable living skills at the same time.

One of the highlights of the Grade 12 experience is "Voices," where we interview community members who are engaged in some aspect of "transitioning" to a post-carbon world. Students love visiting Leigh Taylor's house on an eighth of an acre in downtown Guelph where he grows 95% of his own vegetables, fruit and berries in raised and vertical beds, raises tilapia in the basement in a hydroponic system, bees on the roof, and chickens, duck and rabbits in his backyard. Having heard a fairly disengaged young man declare, "*I want to BE Leigh when I get my own place,*" I can attest to the impact of this experience. As an example of the importance of community input in sustaining a program such as this, Leigh is also a paddle and moccasin-making mentor for the program ... oh, and he also helped us to build our own greenhouse and raised beds. Learning to think critically about environmental issues at the same time as gaining "sustainable living skills" and



connecting with people in the community who are active and engaged often helps students to set a path for themselves as they finish high school. I recently received an email from a young man who decided to pursue an engineering degree after interviewing the local owner of a solar company.

Both CELP and Headwaters include a component where students teach younger classes. Grade 10s teach a Grade 5 “Earthkeepers” program. Grade 12s run a Grade 7/8 “Waterways” program and have just started a maple syrup festival in the spring and a harvest festival in the fall. Learning ecological principles to teach to others is much more motivating than circling true or false on a test. Our students start to see themselves as role models and leaders. Some of our ‘least academic’ students in a traditional setting are our best teachers and facilitators. I’ll never forget coming across a Grade 10 student with his cool hat on backwards and his jeans slouching down past his boxers; he was standing in a clearing holding a colourful maple leaf up to the light surrounded by a group of grade 5 ‘wanna-be-cool-like-you’ boys. They were looking up at that leaf with awe as they examined its veins and colours in the light ... what power a moment like this has in a world where being “cool” usually implies apathy and dissociation.

The last step of our programs is a culminating “action project” where students use teamwork, communication, and project-planning skills to take action in the community in some way. Grade 10s plan and implement an “active citizenship day” to volunteer with an environmental organization in the community in some way. Grade 12 students create a class “resilience” project around transitioning to a future that reduces dependence on fossil fuels. It is up to them to structure their class work, come up with a collective product and define the audience they want to target. Two years ago, a class created a vision for the future of

Guelph: they elected a chair, broke into sub-committees and produced a presentation they made to city council. Imagine their sense of impact when city council not only gave them an audience but the mayor made a motion to have city staff review their recommendations for potential adoption.

What I love most about my job and this program is that this semester is almost always life-changing, but it’s different for each individual. Experiential education is by its very nature differentiated instruction. A big focus for us is journaling and debriefing so that each student interprets their experience and transfers their learning to their own lives in some way. For many students, the realization that they can step away from a previous peer group and find an entirely new group of friends is their most powerful (and developmentally appropriate) learning, and they take that self-confidence back to school. For others, it is that they are out of a peer culture of apathy and into a peer culture of caring for the semester. Students who have been involved in the environmental movement before gain a new sense of hope through learning skills related to sustainable living. Certainly we hear from parents and students that this opportunity for self-development is critical for many of these young people.

I have also been thinking about the value of the four-credit program structure in terms of supporting students with mental health issues. Stepping away from a negative peer group or feelings of anxiety or isolation at “regular school” has certainly been a side benefit for a number of our students. Learning social skills, conflict resolution and confidence in feeling accepted and not judged in a group setting is another. As teachers, although we are not trained mental health workers, we get to know the students in our program better and we can facilitate relevant group experiences or support individuals through finding resources for them. Sometimes, a supportive peer group



chemistry works its own magic. One student with Obsessive Compulsive Disorder who was experiencing resultant panic was able to articulate to our class circle how she felt when the door was left open or the stove was left on. The rest of the class voiced that it was no big deal to try to keep the door shut and turn the stove off and they were glad to know why she was upset. They gained a better understanding of what it is like to live with OCD and she experienced real acceptance and non-judgement from peers. I know this has had a lasting impact for her and has allowed her to meet other goals in her life.

Mike Elrick designed the Grade 12 program to follow the archetypal path of the hero's journey as identified by Joseph Campbell. He believed that, in this time of environmental change, we need to encourage young people to be aware of the world and themselves as well as brave enough to step outside of a dominant

culture revolving around consumption and material possessions and to consider another path. Mike felt that if we could offer students a chance to reflect on their learning, selves and community as they transitioned into adulthood, they would be more informed in their life-paths and more able to build community. In CELP and Headwaters, through structuring experiences that allow students to put their hearts into their education, students have consistently demonstrated the ability to transform themselves through new learning and have recognized their power to transform the world around them. As we approach the twentieth anniversary of the program, we plan to contact as many alumni as possible in order to come together and celebrate the rich experiences we've all shared as part of the CELP and Headwaters journey. And, it will be interesting to hear how these formative experiences have impacted their lives thus far.

*Katie enjoys gardening with her two-year old son who will be passing on his love of freshly picked tomatoes and stomping in mud puddles to a just-arrived baby brother. She and her husband Dave are part of a lively and vibrant Guelph community of friends.*

## **Geoventure**

*Moira Secondary School, Belleville,  
Hastings and Prince Edward District School Board*

**By Katie Cole**

Target Size of Group:	24-26 students
Nature of Students:	All pathways
First Year Offered:	1989
Time of Year Offered:	Second Semester
Time of Day Offered:	Daily, full day
Frequency:	Annually
School Population:	650 Students
Additional Course Fee:	\$400

### **Credits Offered:**

- SNC 2D1/2P1: Science
- ENG 2D1/2P1: English
- CHV 2O5: Civics
- GLC 2O5: Careers
- PAF 2O1: Physical Education: Outdoor Education

### **Major Outdoor Experiences:**

- 3-day winter camping at Vanderwater Conservation Area
- 4-day hiking/Civics trip to Ottawa/Gatineau
- 4-day bike trip throughout Prince Edward County
- 4-day canoe trip in the Kawartha Lakes

### **Leadership Opportunities:**

- Leading Daily Physical Activity (DPA) for Grade 7/8 classes
- Outdoor Winter Games Festival for Grade 7/8 students
- Celebration of Dance leaders for elementary students
- Bike pods of students traveling together alternating leadership opportunities
- Group challenges
- Science workshops for elementary students
- Contacting locations and planning various trip activities
- Work placement

### **Other Key Elements:**

- Students complete a four-day work placement
- Many outdoor day trips throughout the semester

### **Community Partners:**

- Fink Centre, Sandbanks Provincial Park, YMCA, One-to-One Fitness and other local fitness clubs, Belleville Rowing Club, Quinte Conservation Area, Baxter Conservation Area, and many other local businesses.



**Certifications Earned:**

- Red Cross Emergency First Aid;
- Canoe Tripping Level 1

## **The Role of Outdoor Integrated Programs in Developing 21<sup>st</sup> Century Learning Skills**



Finally, a classroom of my own: desks to arrange the way I want, bulletin boards and display cases to decorate, shelves to fill, walls full of historical artifacts, and even a hand painted canoe hanging from the rafters. The classroom can be an exciting place when full of young, engaged minds; however, this is not where the magic happens. It isn't until a large dynamic group of students enters the great outdoors that we experience life-changing learning opportunities. Nature truly is the ultimate classroom.

In my third year as a secondary school teacher I jumped at the chance to learn from the best as a co-teacher of what is known as

the Geoventure program. The opportunity to work along side a passionate, energetic and dynamic leader was the best professional development I have had to date. Her extremely hard-working demeanour and never-ending enthusiasm were traits seen in the two preceding teachers of the program as well. Perhaps the most important thing I learned was to make the Geoventure program my own, and a year later when I inherited this full day, outdoor, four credit program, I had seen what it takes to expand learning beyond the walls of a classroom.

Outdoor education transforms a classroom, engaging individuals and helping to build

essential 21<sup>st</sup> century learning skills. As I have been introduced to Michael Fullan's *Six Cs* – an approach to education that aims to ensure the well being of students and develop essential leadership skills – I find myself thinking about the role outdoor education can play in 21<sup>st</sup> century skill development. Character education, citizenship, communication, collaboration, critical thinking, and creativity are key qualities that must be nourished in learning environments for both student and societal well-being. Extending learning beyond the walls of a classroom is essential to shaping these entrepreneurial abilities valued by today's society. Learning can happen anywhere, and as educators we must model and encourage students to recognize and act on opportunities for growth and development. We must help to instill a deep seeded desire to learn in all environments and from all people.

### **Character Education**

Teaching is about building relationships with and between students, and taking them outside is one of the best ways to foster these connections. The task of assessing student needs can be challenging and sometimes the greatest needs are the development of core character traits. A few days outside, a couple of nights under the stars, a chat or two around the campfire, and those individual strengths and weaknesses are easily uncovered. The greatest success, however, comes when students themselves become aware of not only their own strengths, but also the strengths of others. When students have the ability to decipher the assets and needs of individuals within the class, a cohesive group is formed. Helping and learning from one another develops a team mentality where everyone's contributions are valued and celebrated. Perhaps the greatest example of compassion I have witnessed in this program came in the middle of a four-day bike trip. After two full days of biking in poor weather, our spirits were

finally being lifted, as we found ourselves at a local ice cream shop. Unfortunately, one student was still focused on the last, and longest, leg of our ride for the day. Her bike was an old, heavy mountain bike that had her working at least three times as hard as everyone else. As she sat, unable to enjoy the ice cream due to allergies, she was visibly exhausted and defeated. With the option to ride along in the emergency vehicle offered to her, she struggled between her burning legs and the desire to make it the whole way. As we grouped up in our riding pods and mounted our bikes, one student in the class came up with the suggestion of switching her easy riding hybrid bike for the bike with a seat that was low and a chain that kept falling off. While witnessing this truly selfless act, I was confident that the other 22 students and 4 supervisors reflected internally, as did I, about whether or not we would have been willing to do the same. As the sun peered through a break in the clouds, the two girls rode cheerfully to our camping destination. That evening, as we shared kudos around the campfire, this act of kindness — along with many others — was celebrated, and a new campfire activity of recognizing and giving thanks to each other became a trip tradition. This is just one of many scenarios I have witnessed when students take the lead to help meet the needs of others; a prime example of the character education that can occur when students are placed in an environment that fosters relationship building and teamwork.

### **Citizenship/Global Awareness**

The pillars of the Geoventure program (Leadership, Critical Thinking, Taking Action and the Environment) go hand in hand with developing global awareness and citizenship among students. When tripping outdoors, students learn the importance of general campground etiquette and the 'take only memories, leave nothing but footprints' mantra



becomes a respected norm. With a strong environmental focus and a Science curriculum that covers climate change, the program provides ample opportunities to combine curriculum expectations with taking action to improve and promote environmental sustainability. One of my favourite trips of the semester is a bike trip through Prince Edward County. Our own local community has proven to be a rich source of educational fun, with many community partners eager to share in the Geoventure experience. At Sandbanks Provincial Park, students have the opportunity to learn about an invasive species, Garlic Mustard, and to assist the park naturalist in removing this damaging plant. The many organic farms, wind turbines, and solar panels in the area promote rich discussion, but perhaps seeing everyday citizens taking their own measures to minimize their ecological footprint has provided the greatest impact on our learning. Students are able to witness green living in action and hear from individuals who have optimized the reduce, reuse, recycle, process to produce as little as two bags of garbage in an entire year. This sharing of best practices and the motivation behind it helps to bring awareness to global environmental issues and inspire a change in behaviour. After gaining knowledge and skills from this wide array of local organizations and community members, students are encouraged to take action and help make this world a better place. They have created campaigns at the school level to reduce the use of plastic water bottles and electrical output, participated in school-wide waste audits and community trash bashes, planted trees at Ontario Provincial Parks, and shared their knowledge through social media. Also, at the end of a weeklong bike trip, students become comfortable with a form of transportation that is cheap, easily accessible, and environmentally friendly. They can safely travel throughout their own community to experience adventures long after the program ends. When we model, encourage,

and help brainstorm ways for students to be positive contributing members of society, they jump at the chance to have their voices heard and make a difference.

### **Communication/Collaboration**

Creating opportunities for students to collaborate, share knowledge, and learn from one another is a fundamental goal in every classroom. From their first day in Geoventure, students are grouped using a wide variety of methods for almost everything. Tent groups, cook groups, car groups, bike pods, canoe partners, seating arrangements, the list goes on; each experience provides an opportunity to work with new individuals on rich learning tasks that require communication and collaboration to set and meet goals. The countless number of small and large group learning opportunities, presented each and every day in Geoventure, help to establish a team mentality that often takes an entire semester to perfect. A great example of successful collaboration in this course is when a small group of students plan a trip meal for the entire group. The planning, preparation and execution of this task often has students taking on roles they have never played before. First, students must decide what they want to cook; they have to take into account the environment they have to cook in, supplies they will need, nutritional value, individual dietary restrictions, environmental concerns, and budget. Next, they need to go grocery shopping; this can be hectic, but practice makes perfect. Then comes the packing. Students need to identify what needs to be pre-cooked and who is going to carry what. Finally, it's their time to shine as they work as a team to prepare a delicious meal that will please the crowd, and just when they think it's all over, it's time to cleanup. Has pancake mix been left behind? Have there been not enough or, in many cases, too many, hotdogs purchased? Has cutlery been misplaced or maybe never

packed? Absolutely! Communication is a very important part of this process, and when lacking, problem solving and creativity are necessary.

### **Critical Thinking/Problem Solving**

Problem solving is an essential skill required of 21<sup>st</sup> century students and something that can easily be simulated in the great outdoors. Problems such as broken equipment, wet clothes, wrong turns, and forgotten gear are all part of the fun, and vital opportunities to practice creative problem solving. Programs with an outdoor focus also present an authentic stage to address the many environmental concerns facing us in the 21<sup>st</sup> century. On one particular canoe trip, after discussing the abiotic and biotic factors that make up lake turbidity, students were able to use their knowledge of the greenhouse effect to critically discuss the benefits of murky water. With access to canoes and a lake, students were then able to practically apply their knowledge by measuring lake turbidity using Secchi disks. The question posed to students was, "How does the distance from shoreline affect lake turbidity?" A laminated black and white disk was all students were provided so, aside from the scientific inquiry, students were required to develop measurement strategies utilizing the minimal materials available. When sharing results and conclusions drawn from this lab, some groups had creative visual results, others resourcefully calculated in canoe lengths and, with the use of benchmark measurements, one group was able to report a specific lake turbidity depth of six feet. This experiential learning opportunity offered an afternoon full of critical thinking, scientific inquiry and problem solving, while addressing global environmental issues.

Real time problem solving is also a reality when exploring new horizons and taking adventures. One hot spring day, when extracurricular activities were at an all-time

high, I was left with a very small group of students. With a canoe trip just around the corner and few must-do things to prepare, I asked the group what they would like to do. We had a few issues with the canoe trailer and two gentlemen in the class made note that this needed to be addressed. As my expertise in mechanics is non-existent, I had been putting off this task, but decided to let them take the lead. Out to the trailer we went. New chains needed to be attached, but rusty stuck-on bolts were preventing us from getting very far. The students requested a variety of tools and led me to 'The Shop,' a section of the school where Tech classes take place, to get what was needed. They continued on with the task until we got to a point where they needed something 'The Shop' could not provide. I figured I would need to go out after school to grab what was needed and put the project on hold until the following day. My students had a better idea. "Lets bike to the hardware store!" they suggested. Helmets on, a quick ABC check, and we were on our way. After a short ride to the store and a detour to Dairy Queen for an afternoon treat, we were back at the school with new chains installed before the bell rang. I had the pleasure of learning a lot that day and the opportunity to participate in an afternoon of student-led learning, where they did all the work, and I was just along for the ride.

### **Creativity and Imagination**

Being outside in an environment where play is encouraged also brings out the best in our imagination. Teenage students transform back into kids in the best ways possible. Thrilling childhood games spill out of the mind, and activities like 'kick the can' and 'hide and go seek' bring out pure joy and 100% participation. Students lead in the most organic way, setting and policing rules, even debriefing to make adjustments and improve the game. Winter camping is the first trip of the Geoventure semester and this trip provides

students with the opportunity to develop their own outdoor winter games and construct group shelters for sleeping. Student take extreme ownership of these tasks — they are after all going to have to play the games and sleep in the shelters. The creativity put forth is outstanding; I can't resist joining in game time fun and have even abandoned my own shelter for a much more inviting, student created, sleeping space.

### Information and Technology Literacy

Geoventure incorporates technology as an essential tool to enhance learning in the 21<sup>st</sup> century. Since my involvement in the program, we have acquired a classroom projector, iPad, and Apple TV; all are utilized to improve student engagement and maximize learning opportunities both in and out of the classroom. The advantages to improved technology are many, including enhanced communication between teachers, parents, students, and the entire school community. Students have utilized Twitter, Facebook, and blogging to share experiences and educate others. The potential that new technology has to enrich this program is exponential and I have only tapped the surface. On the first day with our new iPad, I decided to try something new. I downloaded an app called *Socrative*, which allows you to create a quiz/questionnaire that students can respond to on mobile devices. My hope was that there would be enough students with smart phones so that everyone would be able to complete the activity. I was prepared for this to either succeed or fail, but comfortable taking the risk either way. To my amazement, within ten minutes, everyone had completed the quiz and we were ready to move on. Without distraction, students were able to pull out their phones, download the app, log on to complete the activity, and share their device

with a partner if needed. Information and results were sent immediately to my Google account. The simplicity and effectiveness of this new learning experience was eye opening, and alerted me to the continuous leaning that will always be needed to stay relevant.

Outdoor education not only provides countless opportunities for student learning, but also has had a tremendous impact on myself, both professionally and personally. Aside from students teaching me how to fix up a trailer, use Twitter, and much more, the best teaching advice I ever received came from a student during a road trip to Ottawa. I am not an expert navigator, on land or at sea, but always made sure we are traveling in familiar areas when leading a trip. As I always insisted, trips are a team effort, so as students would squish in to my little car, tasks were assigned for the drive. Someone was named 'Car Captain' and put in charge of some 'get to know you' games, while the passenger in shotgun was my navigator. I would hand over directions and it was the responsibility of this individual to help get us where we needed to go. On one particular trip, as a student reflected on her own navigational skills, she shared with us a story of her adventures with her father. She explained that any time they were travelling out of town, her Dad would give her the map and require her to direct them where to go. After a few complaints about the fact that she could never go sleep or just put on her headphones, she then clarified that, "he always knew exactly where we were going, but wanted me to lead the way." This is a great metaphor for teaching and my goal as an educator. As I continue to work toward these words of wisdom, I look for areas of student need and try to facilitate exploration of their own leadership skills to get there. This vital task requires a continuous effort of exploring new ways to improve upon my navigational skills.



## ***JOURNEYS into RELATION***

*Katie loves being outside. Not only because of the way it makes her feel, but also because of the impact she sees the outside have on those around her. Character education, citizenship, communication, collaboration, critical thinking, and creativity are embedded into learning opportunities in outdoor education programs across the province, and with the integration of technology, we can ensure the necessary 21<sup>st</sup> century skill development needed for student success. As Katie moves into other phases of her career, she will always carry with her the phenomenal learning experiences she has had teaching this particular program. She will continue to incorporate experiential learning opportunities in all curricular areas.*



*JOURNEYS into RELATION*





## **Integrated Canadian Experience (ICE)**

*The York School, Toronto, Independent School (CAIS, CIS, IBO)*

**By Sara Gardner**

Program Website:	<a href="http://blogs.yorkschoo.com/IceWrites/">http://blogs.yorkschoo.com/IceWrites/</a>
Target Size of Group:	3 classes of 20 students maximum
Nature of Students:	International Baccalaureate Middle Years Program
First Year Offered:	2006
Developers:	Paul Gifford, Sara Gardner, Jim Brickell
Current Teachers:	Jim Brickell, Sara Gardner, Rob Burkett
Time of Year Offered:	September – June
Time of Day Offered:	Every other day
Frequency:	Annually
School Population:	600 students

### **Credits Offered:**

- ENG 1D: English
- CGC 1D: Geography
- CHC D: History
- CHV 2O: Civics

### **Major Outdoor Experiences:**

- 4 days at a Muskoka camp,
- 2 nights traditional winter camping,
- Biking and camping on Toronto Island



## **PUSHING BOUNDARIES: The Challenges and Rewards of the Integrated Canadian Experience**

*A little longer it delayed, howling under the stars that leaped and danced and shone brightly in the cold sky. Then it turned and trotted up the trail in the direction of the camp it knew, where were the other food-providers and fire-providers.*

*Jack London, "To Build a Fire"*

I look up from Jack London's cautionary tale of a northern trek gone bad. I've just spent twenty minutes reading my boisterous Grade 9 class a bedtime story. Out loud (the way stories should be told), in a tent, in Muskoka, in late January. It worked. No one is stirring. Just the gentle rise and fall of their breathing. I take off my reading glasses, settle deeper into my sleeping bag, click off my head lantern, and drift into a long winter's nap. It is the start of the Integrated Canadian Experience (ICE) programme's annual winter camping trip. Tons of snow, but not too cold. The temperature is only minus thirteen, and everybody is ready for a good night's sleep.

We use Egyptian cotton prospector tents with small wood stoves. They're pitched right on the snow. Our system of freshly cut balsam branches and double sleeping bags keep us warm and cozy. Students learn that balsam needles are flat, making a perfect bed; that they filter out any spills or condensation, keeping us dry; and that, fortuitously, they smell pleasant and fill the tent with their perfume. Students come to understand that perhaps our earliest travel technology here in Canada is still sometimes the most suitable technology. They learn what it means to be a northern nation. And, they all choose to sleep with their toques on.

Earlier that morning, wearing snowshoes, the kids had arrived at the campsite, pulling sleds packed with their personal gear, along with Swede saws, axes, water buckets, snow shovels, first aid kits, tool boxes, a wannigan full of food, and cooking equipment. Packing only what's

required, the necessary clothing and gear for one winter night in the bush is a great way to focus young, urban minds. Smartphones, Skype, Twitter and Google are of no use. Thinking ahead, predicting what's next, making good decisions about equipment and behaviour — these are the things that matter.

Every year, some kids want immediately to jump in snow banks and have snowball fights — natural impulses for young teenagers. But getting wet is a bad idea if you're not going indoors for twenty-four hours. It's not long before they're interested instead in contributing to camp: chopping wood, fetching water, getting a good boil going on the fire. Taking kids winter camping is risky, but the obvious natural consequences and lessons to be learned are worth it.

The ICE programme is half the Grade Nine course load at The York School, a coeducational, independent, International Baccalaureate school in the heart of Toronto. It encompasses Grade 9 Geography and English curricula as well as the Grade 10 History and Civics course. As its name suggests, ICE focuses on Canadian content, making the most of the school's urban setting — both its cityscape and local ravine system — as well as its nearby northern environment in Muskoka. The programme's blocked scheduling is key for effective out-of-classroom activities. The curriculum is woven through a wide range of experiences, starting at camp, continuing with multiple neighbourhood visits in the city, a trip to Ottawa, then returning to Muskoka for winter camp, and concluding with one of five

regional visits to a distinct part of Canada for each student. Our students are privileged to have access to opportunities and resources; our programme asks them to develop the strength and breadth of character to take full advantage of these.

ICE sounds exciting. But, to many students it is also intimidating. Olivia approached her Grade Nine year with unusual trepidation. A high-achieving student, she sat on the Head's List with an excellent academic average. Her work was always presented on time and addressed all the criteria of each assessment. Olivia knew how to succeed — in class. The ICE programme, however, was immediately presenting her with challenges that she wasn't sure how to meet. Olivia did not see laid out in front of her a clear path to a top mark. Instead, we were asking her to wade out into new experiences, to wrestle with the course material, to discern for herself what was most important and how it connected to other ideas, and even how she could best present her findings. The ICE programme was asking Olivia to take risks, and to think for herself.

ICE kicks off the year in September far from desks, laptops and textbooks. We begin building our community at camp. In the first week of school, Olivia and her cohort found themselves in the imagined boots of early explorers in the woods of Muskoka, barrelling through the bush looking for clues. Clues to what, they weren't even sure. They were to record their findings in their new journals — their *anything and everything books*. It was up to them to decide how to record their observations. Olivia and her group carefully followed the criss-crossing paths through the woods and around the lake. The last light of summer filtered through the canopy of leaves, which was making its final stand against the early autumn winds. The kids gained momentum as they won distance from camp, feeling their new freedom pull them from direct supervision. Diligently but nervously,

Olivia kept track of the clues she encountered. A map of early trade routes. A journal entry from Susanna Moodie. An annotated map of the Arctic outlining the effects of climate change. A table exposing trends in Canadian immigration. An overturned canoe with a Tom Thompson sketch peeking out from under the bow. A piece of birch bark. When, suddenly from across the lake, a gong sounded, calling the students away from their sleuthing and back to the lodge. The explorers slowly wound their way back to camp.

Story maps are one way we ask students to present their ideas — a visual representation that ties together discrete information into a single coherent theme. A good product will include visual symbols, elements of a story, hard facts, images and metaphors. They can speak for themselves and tell a whole history. Back at the lodge, Olivia's group worked to figure out how the clues were connected, and what story they could tell about Canada's larger narrative. With her head bowed over the clues her group had collected and with their ideas flying, she forgot that she didn't understand what was expected of her, that she hadn't seen an exemplar and that no one had shown her a rubric. The thrill of having been out on her own in the wild for two hours and the excitement of exchanging big ideas with her friends overtook her, and she found herself wholly immersed in the work before her. Together, the four teammates decided that their story map would focus on Canada's reliance on natural resources, that extraction of material wealth from our land might even be connected to the previous night's campfire story from Wayland Drew's *Halfway Man*, where an "I'll take that, that's mine" attitude exposes the dangers of greed. Olivia was now excited to figure out how best to represent her group's idea visually in this new thing called a "story map." By allowing herself to throw away the restrictions imposed by her traditional classroom learning, she was letting herself be swept away by the learning itself. Success.

ICE challenges traditional models of teaching and learning by offering students room to explore through new experiences. By placing students in the midst of the unfamiliar while still offering support, we are encouraging them to overcome feelings of anxiety caused by the unknown. We are asking them to strengthen character, to push past boundaries that too often artificially and prematurely limit growth. It's precisely out of these feelings of slight discomfort, in this space of the unfamiliar, that the most lasting learning can take place. Eventually, yes, we bring the students back to their desks, in front of their computers, where they will consolidate their learning into a very traditional-looking essay, or perhaps a more engaging photo-essay, sometimes even a documentary. But, by then their familiar territory has become more expansive, richer.

Our first term is full of collaborative work, independent research and outings as the class explores the relationship between Canada's physical geography and the nation's history. Students conduct research into the country's regions and resources, examine Canadian literature, interview new immigrants to build profiles, and learn the place of personal narratives in a larger historical context. After developing an understanding of the diversity and complexity of Canada's landscape and its people, students find themselves back in Muskoka, in the dead of winter, to come to terms with the "northern" nature of Canada. And, to understand the impact of the North on a person's character.

Preparing for her winter adventure, Olivia was about to find out how she would withstand the test of the true north. Pushing back the biting cold, she zipped her outer layer right up to her chin. As she laced on traditional snowshoes, she didn't for a moment wonder why we were undertaking this trip, or what her post-trip reflection would have to look like, or how the test would hold her accountable for this experience. Instead, she was wondering

how much colder the winter air would feel once the sun had set, how warm the tent would really be in the middle of the night and whether the food would be palatable after all. She marvelled at the length of time remarkably large falling snowflakes rested on the arm of her jacket before disappearing into the broader winter scape. Olivia was in the moment. But, she was also feeling a little uncomfortable.

The tingling in her feet had registered. Maybe she just needed to get moving. She wasn't sure, but she knew she needed to address the cold she was feeling in her feet. Immediately, she offered to pull the sled. We had suggested to the students that one way to stay warm was to keep the internal furnace fired through activity. She wondered if her boots were a little tight and if not enough insulating air was circulating to warm her toes. As she hauled the sled into camp, she nervously recognized that her toes were still aching cold. Not wanting to stand out for a seeming weakness but having done all she could on her own, Olivia asked for help.

The trees were popping in the minus thirty degrees, their frozen sap expanding beyond capacity. As Olivia called out to me, I noticed that her breath hung limply in the frigid, late afternoon air. It was indeed cold. I looked around under the dull orb that hovered close to the horizon, thinking about the wood we had yet to cut for our fire and assessing how much longer before we could achieve a comfortable temperature in the tent. Working with the other trip leader, we examined those who — despite packing lists, an official gear check and a practice trip — were still suffering from the cold. We decided that we would need to take Olivia and another student back to the lodge. Frostbite is a real fear in the Canadian winter and specifically during this expedition. Unattended, frostbite can cause extensive damage to one's tissue layers as circulation is inhibited and the affected area begins to harden, succumbing potentially to permanent



damage. We were not prepared to take any chances with Olivia's feet.

Safely back at central camp, we pulled her boots and socks off to discover one toe had lost colour. Following best practices, we submerged her feet in water, slowly restoring appropriate blood flow to the area. We were happy to see — as we began the process of warming her — the paleness in her toe give way to a new, red tinge. Sighing with relief, we saw that blood flow was being restored. Olivia had successfully listened to the warning signs of frostbite's close and less serious cousin — frostnip.

Few ICE experiences present risks equivalent to those of winter camping. Spending a night out on Toronto Island is exciting but presents little danger. We look across the harbour and back to the illuminated skyline as we contemplate our city's rich history. Interviewing newcomers to Canada in Toronto's diverse cultural neighbourhoods is a rewarding experience for young adolescents. They learn to approach strangers with curiosity and sensitivity in order to ask them about their immigration experiences. The only risk students face here is a perceived fear that they might look silly as they overcome their shyness.

Stories play an important role in the ICE student's year. Students seek to understand Canada's narrative as a nation, reading tales from across the country to see how our collective identity might be reflected in our literature, and studying our history and geography to determine the relationship between these forces and their impact upon whom we are becoming. Students become knowledgeable and opinionated on issues of civic concern as they learn what it means to become responsible citizens and active members of their community. And, they glean broader truths from personal experiences — their own and those of people whom they interview. As cultural journalists, the ICE student becomes a story-seeker and a

storyteller. They post reflections to their blogs, turn out academic papers, build manual book reports, write pieces of historical fiction, and create documentaries.

The year culminates with a showcase called "ICEpics", an evening in which students share their year's work with their peers, parents and friends. By May, students have travelled to one of five areas of Canada to uncover important stories from the various regions: environmental stewardship in British Columbia, mining in Alberta, art and nature in Killarney, Ontario, excursions on the Ottawa River, music and kitchen parties in Newfoundland. As a class, they bring together all that they have learned and envelop their documentaries in energy and enthusiasm that come from the commitment they have shown all year to developing their understanding of this country. Each contributes a piece of individual work — an introduction to one of the films, a reflection on his or her experience or maybe a song inspired from an ICE moment. Together, the evening presents a comprehensive and insightful vision of our nation. At the same time, it celebrates a group of high achieving and successful students who have come together as a learning community, faced real-life challenges and worked together to find solutions.

Out on the frosty trail that day in February, Olivia's class shared an exciting adventure. A beautiful day spent facing the elements, addressing as a community our most basic needs and wondering at the formidable strength of the environment around us. Ultimately, we enjoyed the comforts of a full belly and the warmth of a fire. Olivia's experience was different. She was challenged more deeply, faced heightened discomfort that was real, and came to understand that she had the strength of character to cope with this kind of test too. The bush had become as much a medium of learning for Olivia as the textbook she had left on her desk. At the time, Olivia only



understood a portion of the impact this experience had on her character. Three years later, when she reflected as a graduating student upon her time in ICE, she had greater insight into how the program had offered her an opportunity to grow. Olivia learned that her peers were in fact her collaborators, that new challenges could be learning opportunities and, most importantly, Olivia realized that she was a strong individual.

Part of what makes ICE perfect for Grade Nine is the age of the student. At fourteen and fifteen, most of our students have not often been left to their own devices. They are usually told what to do and how best to do it. As teachers, we are in the habit of lining up their assessments as way markers to ensure they are on the correct path. In ICE, we still offer students guidance as they move through the curriculum, but we also encourage their independence. And independence is what they crave at this age. Each of the programme's experiences builds on the previous ones, promoting self-confidence, increasing student responsibility and celebrating engagement. Students learn to trust their instincts, value curiosity, develop their creativity, reason thoughtfully and exercise their own voices.

As a teacher, every year brings a new group of students, new challenges, new opportunities. And, this year, as I awake on an early February

morning in a prospector's tent that is a touch too cold, it registers that we have let the fire get a little too low overnight. I look across the sleeping bodies of ten of my students, and watch as our tent-leader quietly opens the stove door and places another piece of wood over the embers. It catches in no time. She lays her head back down, confident the kids will wake up comfortably and contented. I too settle back into the warmth of my sleeping bag, and wait peacefully for the stirring and rustling that will indicate that this year's group is ready for the morning. In the meantime, I pick up one of the student journals and turn to last night's entry:

*Pure silence is rare to find in city life, and that is why my time sitting in the dark took me by surprise. As I sat against that tree, with the snow around my body forming a comfortable seat, the silence seemed to overwhelm me. I realized the beauty of the cold forest, even in complete darkness. When we were called back to the trail, I did not want to leave my snow-seat. It took me at least 10 minutes to rejoin the group. For the rest of our hike, I did not say one word. My mind was completely concentrated on the surrounding woods; the noisy silence, and the fresh smell. By the end of the night, I had gained a new appreciation for the fresh forests and the silence of the night.*

*Brandon, 2011*

*When she is not teaching, Sara enjoys spending time outdoors with friends and family. Her love of walking grew in the Appalachians where she started hiking as a youngster with her father. Later, they explored the European Alps and the Camino de Santiago together. Now, a new mother to twins, Sara looks forward to being able to soon share the trail with her little ones.*

*JOURNEYS into RELATION*



## **Trailhead *and* The Bronte Creek Project**

*Gary Allan High School, Milton, Halton District School Board*

**By Doug Jacques**

Program Website:	<a href="http://brontecreekproject.org">brontecreekproject.org</a>
Target Size of Group:	21 max. for both
Nature of Students:	University and college students, or Outdoor/Environmental Pathway
First Year Offered:	Trailhead: 2007      Bronte Creek: 1989 (Bronte Creek first taught as non-integrated alternative program in 1980)
Time of Year Offered:	Both Semesters
Time of Day Offered:	Daily, full day
Frequency:	Every semester
Location:	Camp Sidrabene (North Burlington)
School Population:	Regional Program: all HDSB & HCDSB students eligible
Additional Course Fee:	\$575 for each program; bursaries available.

### **Credits Offered:**

#### **Grade 10: Trailhead**

Trailhead is essentially a feeder program for BCP. It allows students to experience the integrated curriculum program model while taking a number of required courses. If this format works for them and/or inspires their academic or personal pathway, they may consider BCP as a suitable option for Grade 11 or 12.

- ENG 2D: English
- GLC 2O: Career Studies
- CHV 2O: Civics
- PAD 2O: Physical Education: Outdoor Activities
- IDP 3O: Interdisciplinary Studies

#### **Grade 12: Bronte Creek**

- NBE 3U: English: Aboriginal Voices
- EPS 3O: English: Presentation Skills
- PAD 3O/4O: Physical Education: Outdoor Activities
- IDP 4U: Interdisciplinary Studies
- CGR 4M: Geography: Environment & Resource Management

### **Major Outdoor Experiences:**

- Daily experiences on site for both programs

#### **Grade 10: Trailhead**

- Full-day Mount Nemo hike (Bruce Trail)
- Canoe skills practice at Kelso Conservation Area,
- 5-day Algonquin canoe trip
- 5-day organic farm visit,
- Halton Forest Festival (1st semester)
- Trout Unlimited creek restoration
- Growing and Sharing Food in Halton: apple picking (first semester)

#### **Grade 12: Bronte Creek**

- 6-day Algonquin canoe trip



## *JOURNEYS into RELATION*

### **Leadership Opportunities:**

#### **Grade 10: Trailhead**

- Teaching the Novice *Earthkeepers™* program to Grade 4s

#### **Grade 12: Bronte Creek**

- Teaching the *Earthkeepers™* program to Grade 5s
- Individual semesters choose partners to work with such as “Me to We” or “Learning for a Sustainable Future”

### **Other Key Elements:**

#### **Grade 12: Bronte Creek**

- First Nations partnerships

### **Major Challenges:**

- Limited to 21 students
- More difficult to recruit older students after the elimination of Grade 13
- Regional programs not as well known as home school programs
- Multiple SHSM programs to choose from within school board

### **Integration of Specialist High Skills Majors:**

- Environmental SHSM an optional part of BCP

### **Certifications Earned (BCP):**

- Wilderness Medical Associates Wilderness First Aid
- GPS (Greencheck)





## **Encouraging a Deep Reciprocity Towards the Earth and Each Other**

The Bronte Creek Project (BCP) is a four-credit integrated high school program, with an outdoor, environment and career exploration focus for Grade 11 and 12 students in the Halton District School Board. BCP has been operating for more than 30 years and is currently running at Camp Sidrabene in north Burlington. Our program expanded seven years ago to include Trailhead, a four-credit integrated program for Grade 10 students, with an outdoor, environmental and community focus. The above chart and our website elaborate on our program and staff team.

My career, like many lifelong outdoor educators, started with a moment in the wilderness. Just under 40 years ago, I spent a summer as a Leader-in-Training at Camp Kandalore, a canoe tripping camp in Haliburton. Having managed to convince the tripping director that I was needed as a tripping assistant, I was able to help on three river trips, punctuated by a short solo survival. At the end of the third trip, I was sitting one night by a waterfall in what seemed to be my only possessions, an old pair of red Converse running shoes, a pair of very worn camp shorts, and a red pipe glowing with tobacco. For what was probably only an instant, I seemed to belong only in the wilderness; the rest of the world simply vanished.

Although staying connected to the natural world now requires more effort, I have persevered, and the last 25 years at BCP has become a way for me to both improve and deepen my own and other people's connection to the natural world. In moving towards other work in the near future, the meaning of that moment has been at the forefront of my thoughts. Although I am grateful for a lifetime of learning and teaching, I am perhaps more appreciative for what that moment represents to me: a deep connection to the earth, and a more peaceful place as a person on the earth.

Contemporary education has a very strong emphasis on the delivery and evaluation of both information and skills. Integrated credits by the nature of their intention and design, offer students an opportunity to reconnect with earth and personal qualities inherent in themselves. Although compatible with current trends in education, students and staff in integrated credits do emerge with a different perspective on what learning is. Part of our current narrative now is a relationship with First Nations Aanishinaabek Elders Helpers, Fire Keepers and Crafters. The worldview and teaching they share has helped to add both meaning and context as to why integrated credits are transformative. In respect to both relationships with the earth and the learning required to develop good qualities in people, the Aanishinaabek have a very long, rich and sophisticated system of teaching and healing that has been refined over thousands of years.

Transformative experiences are both intentional and serendipitous. From the very first day of the program, we plan experiences that immerse people in the natural world. Daily walks, solo spots, naturalist work, acclimatization, stream restoration, outdoor living skills, primitive skills, nature autobiographies, observing seasonal change, long hikes, canoe trips, winter camping, research projects and essays are all intentional experiences. The serendipity might come in the form of a butterfly, moose, flower, sunset, or first breath of spring air. Although the intensity of experience will vary, if there are enough opportunities, all students leave with a deeper connection to nature, and a realization that their connection to nature is a lifelong and permanent relationship.

I have also come to understand that one of the driving forces behind integrated credits is academic rigour. Students soon discover that when subjects are integrated, there are often

fewer small assignments. However, the assignments that remain require research and critical thinking. One well-done essay completed to a university level helps students to prepare for the world after high school.

Currently taught by Hilary Coburn, the Environment and Resource Management course investigates the complexity and fragility of ecosystems and the pressures human activities place on them. Independently and in collaborative groups, students examine ecological processes, the principles of sustainability, and strategies for resource management. The nature of this course being delivered amidst a campground home to more than 300 species of trees, 30 species of birds and potential threats of a highway running through our backyard is that students feel the connection to the relevant topics and important issues we discuss. Students embrace the real-world approach to resource management problem solving; working in teams for their debates about the GTA highway and Northern Gateway Pipeline, presenting about a biome at the Biomes Protection Conference, analyzing and assessing an environmental policy initiative, and creating a Sustainable Healthy Community for their final ISU assignment. This course provides students with the tools to be informed, passionate and active local citizens who can tactfully approach the world's challenges of environmental degradation and resource depletion.

Our credit package includes the Native Voices course. We have been co teaching this course with Nancy Rowe (Giidaakunadaad), Larry McLeod (Nimkew Ninii), and Peter Schuller (Ozhibiige Ninii). As well as helping to deliver the curriculum from the Voices course (which includes units on Identity, Relationships, Sovereignty, Challenges, Writing and Metacognition), Larry, Peter and Nancy have helped to add perspective to our program by offering traditional teaching, teachings about equity and inclusiveness, and exploring a

common future for people that is both compassionate and sustainable. The reassuring smell of the smudge, and a circle of belonging which ceremony enhances has pervaded the course, creating a continuum from the past to the present and into the future. Quotes from Larry, an Elder, and Nancy, a helper, explain a little of the worldview of the Aanishinaabek people.

*A world view forgotten is what I try to get people to see. We all have it. It just has to be re-awakened.*

*Larry McLeod, 2014*

*In the Aanishinaabek view, Skaagaamik-Kwe (Mother Earth) provides the paradigm and model from which to understand, guide and govern: life, relationships, relational accountability and reciprocity. As helpers, we merely give voice to the human-Creation relationship while sharing the history, custom, knowledge, land practices and contemporary issues of the Mississaugas. The above occurs in a holistic, relational, dynamic and interactive learning process that informs and creates shared meanings, values and understanding of the self through to Creation.*

*Nancy Rowe, 2014*

The inclusion of Elders, Helpers, Firekeepers and Crafters has also helped to highlight the value of experiential education. Nick Bertrand, the HDSB First Nations, Metis and Inuit (FNMI) consultant offers the following observations about Bronte Creek and the First Nations partnership:

*Authentic, relevant, inclusive and experiential education embodies the pedagogical approach to integrated learning at the Bronte Creek Project. The addition of Native Studies curriculum, alongside the purposeful inclusion of Mississauga and Nipissing Elders to guide the program and provide medicine-based teachings, has afforded students some of the*

*most memorable and engaging opportunities many students in Ontario would likely otherwise not have the chance to be a part of.*

*At the heart of Bronte Creek Project lies an incredible sense of student engagement, pride, and sense of belonging. The authentic inclusion of Aanishinaabe Elders guided by thematic-based Native Studies curriculum, and dedicated educators who truly believe in youth, has profoundly impacted the lives and achievement of all students participating in the Bronte Creek Project.*

*Nick Bertrand, 2014*

Both The Environmental Geography and the Voices courses explore worldviews that connect the interaction of people to the Earth, the way people live on the planet and the relationships we have with each other. BCP has been from the early stages a program with an element of environmental advocacy. Making connections between personal relationships to nature, research, critical thought, and the exploration of worldviews uncovers what might be the most critical question of the modern age. How can we move towards a sustainable world, where people act out of a sense of respect and reciprocity for the earth and each other?

The journey of BCP has in many respects paralleled the environmental movement, as it has explored options for a more sustainable planet. BCP was an early adopter of Steve Van Matre Earth Education programs such as *Earthkeepers™*. Introduced by John McKillop in 1988, we still have high school students teach Grade 5 students about basic ecology, natural experience, environmental action, and sharing. Education is still the single most powerful tool in environmental advocacy. Projects we have worked on include stopping garbage dumps, many clean-up and restoration projects, saving marine mammals and wildlife, rainforest protection, logging out west and in Temagami, animal rights issues, escarpment protection,

eating lower on the food chain, gardening, and local food production and protection. Advocacy has included guest speakers, discussion, letter writing, project work, fundraising, protest, boycotts, and personal lifestyle change.

Advocacy skills became crucial when the program was cancelled in the years when outdoor and environmental programs were being eliminated. Current advocacy initiatives include climate change, and the Occupy and Idle No More movements, all of which explore both sustainability and equity.

BCP has always supported an atmosphere of equity and diversity in our community. We have a number of intentional approaches to cultivate these goals. Our course curriculum includes teaching and guest speakers to explore cultural diversity, gender, and sexual orientation. Global environmental issues tend to highlight economic inequity.

Teaching and learning in many of our experiences emphasize a horizontal model of authority. We teach what we know well, and we encourage students to aspire to do things equally well. Students often do as well as instructors in the roles of fellow canoe trippers, cooks in the kitchen, and fellow citizens; they then have opportunities of being the program leader. These moments where learning becomes leading and teaching are a very powerful part of the integrated credit model, and often act as a catalyst for personal growth.

Articulating the experiences and qualities that result in personal growth is challenging as individuals grow in different ways and at their own speed. The desired outcome of being yourself is also unique to each individual. We have developed a set of experiences that offer a safe and supportive environment in which to grow. The initial phase of BCP is full of natural experiences, games, community building activities, laughter and the rediscovery of fun. Students re-cultivate a more childlike perspective that allows them to be both more

open and feel a sense of freedom. Staff role model and mentor a sense of community and a safe environment by providing team building opportunities and structures such as a community contract, community meetings and positive personal validations.

The second phase of the program builds both skills and knowledge for bigger experiences at the end of the program. The outdoor skills, games, drama workshops, hikes and sports provide a physical challenge. The presentations, teaching, debating, and teamwork develop a leadership challenge, and the consistent emotional engagement with peers and the community fosters a powerful sense of connection. All of the challenges are presented as an opportunity to assume small risks to move towards skills and knowledge goals as well as a better sense of self.

While concepts like organization and achievement come up most frequently in reference to our essays, projects, tests, and novel studies, the words that students use in their journal entries and discussions to describe the pathway of personal growth include support, caring, friendship, belonging, freedom, honesty, truth, kindness, compassion, humility, wisdom, and love. Much like the serendipity that creates memorable connections when immersed in nature, authentic relationships and a supportive community result in these qualities being present, promoted, and appreciated on a daily basis. It is an extraordinary experience to be part of a teaching and learning community that honours both a sense of belonging and a deep sense of caring for one another on a daily basis.

Being able to grow personally enables all community members to develop more authentic relationships. Meaningful relationships combined with self-growth, connections to the earth, and a sense of purpose lead to both motivation and success in culminating experiences, including teaching and canoe trips. There can be a sense of synergy from these areas of success that results in a greater sense of purpose and some clarity around how to move forward in life towards both a career and an enhanced wellbeing.

The Aanishinaabek tradition of learning often refers to one's purpose in life as one's gift. Each person has an obligation to discover her or his gift, and the rest of the community has an obligation to help each individual find their purpose. I have a deep sense of personal gratitude for the privilege of both finding my gift at the Bronte Creek Project, and being able to be part of a community that makes a sincere effort to help others find theirs.

Although challenging to describe the elements leading towards a transformative experience in the Bronte Creek Project, it is exceptionally easy to take part in, when learning is active, focused through the heart as well as the mind, and purpose-driven. Laughter, vitality, movement, exuberance, and a sense of wellbeing pervade the atmosphere. Transformation at BCP comes from authentic relationships, joyful moments, accepting the challenge of finding your gift, and a sense of deep reciprocity to the earth, yourself, and others.

*Doug attempts to be in nature on a daily basis. This includes family time at a cherished cabin in Algonquin Park. He has spent 50 years as a canoe tripper, 35 of them as a guide. He expects that his retirement will continue to find him connecting folks with nature and with each other. His camp name was "Duck", and it still suits him.*





## **Pursuits**

*Georgian Bay SS, Meaford, ON, Bluewater District School Board*

**By Richard Fletcher**

Target Size of Group:	24
Nature of Students:	Mainly university-bound Grade 12 students
First Year Offered:	2005
Time of Year Offered:	Fall semester
Time of Day Offered:	Daily, full day
Frequency:	Annual
School Population:	450
Additional Course Fee:	\$500

### **Credits Offered:**

- PSE 4U: Physical Education: Exercise Science
- HFA 4U: Food and Nutritional Science
- NDG 4U: Native Studies
- PLF 4C: Physical Education: Recreation and Fitness Leadership

### **Major Outdoor Experiences:**

- 4-day Cyprus Lake Adventure
- 11-day canoe trip to Killarney Provincial Park
- 4-day Bruce Trail hike
- 3-day adventure race
- 1-day firefighter challenge
- 4-day traditional winter travel in Algonquin Provincial Park

### **Leadership Opportunities:**

- 1 week experience in elementary school
- 1 week work experience in health/science field
- Planning an event for the students in our school or class

### **Major Challenges:**

- Declining school population
- Getting students through mandatory credits within 4 years



## Experiential Staging, Experiential Stages



Experiential learning is the focus of Pursuits. Kurt Hahn, founder of Outward Bound, once said, *"It is wrong to coerce people into opinions, but it is a duty to impel them into experience."* As teachers of Pursuits, our intention is not for students in this program to become hard-core outdoor junkies. Each experience is designed to be progressive, to make students aware, to make them uncomfortable, to expose strength and weakness in themselves, and to connect them with our natural world.

From carrying heavy canoes in Killarney, to slipping on muddy terrain with a heavy pack on the Bruce trail, to braving the wind on an adventure race in November, to embracing the cold in Algonquin, to entering an elementary school class with all the students staring at you, to reciting your story around a campfire — each experience is preparation for something harder. These rich experiences have occurred within the Pursuits program at Georgian Bay SS in Meaford, Ontario.

Pursuits is a four-credit integrated curricular program for Grade 12 university or college-bound students. All of the courses offered work well in conjunction with each other using the outdoor classroom as the main learning environment. From planning, purchasing, preparing and packing a menu, to studying the necessary movements to propel a canoe, to



learning the history and techniques of traditional travel in our region, to making moccasins for snowshoeing, these experiences bring meaning to the saying, *"I hear and I forget, I see and I remember, I do and I understand."*

Our program begins in early September with a field trip to Bruce Peninsula National Park at Cyprus Lake. This four-day field trip's primary purpose is to begin to build a cohesive team for the duration of the semester while testing swimming abilities and learning to canoe in preparation for the extended trip to Killarney Provincial Park. The students are allowed to plan and prepare their own menus without any assistance from their teachers. This initial trial is intended for the students to gain some insight into the process of menu planning without considering nutritional value, weight or volume. After the trip, students discuss the merits of their menus and reflect on improvements for future trips. The students begin to learn the importance of proper nutrition, caloric value vs. weight and the proper percentage of nutrients to prepare menus for travel in the outdoors.

Each of our field trips focuses on traditional self-propelled travel methods that have been used in our region for hundreds of years. From the four-day initial "shakedown" trip to Cyprus Lake, to the eleven-day canoe trip to Killarney, to the four-day hiking trip on the Bruce Trail, to

the three-day adventure race in the Beaver Valley, to four days of traditional winter travel in Algonquin, each trip is progressive in nature; that is, the students begin to take more responsibility in preparing and planning the trips. They learn and begin to understand the importance of travelling safely in the outdoors. By the end of the semester, the students take on all the responsibility of planning the final expedition for traditional winter travel in Algonquin Park. This culminating activity acts as one of the summative assessments of the program and meets many of the curriculum expectations from several of the courses. Upon careful reflection and assisted processing, students also learn skills and develop characteristics for personal growth.

Sarah, a Pursuits student in 2012 writes about her four-day Bruce Trail hike:

*Because of this trip, looking back, I realize I have become more aware of two rather opposing ideas. One, that the power of humans should not be underestimated and that if you want anything enough, you can get it, no matter the obstacles. Two, is that we as humans, are woefully insignificant compared to the force of nature. Although these two points seem to fit together well, the latter actually makes the former necessary. For example, while hiking the Bruce Trail, I realized that it is pointless to want the rocks to be less rocky or the hills to be less hilly. What good will it do to wish these things? What chance do we have but to suck it up and climb over? Does our moaning make it any better? Not one bit. I think it's sad that, in order to fully realize this, I had to come on this sort of trip. In so many of the places we live in our modern world, we seek to control our surroundings, beat back nature, tame her. We seem to force our surroundings to suit us, rather than adjusting to suit nature. In an experience like this hike, you are so far removed from anything that has been shaped to suit*

*humans for most of the day that you start to realize that, however much we try to deny it, we belong in the environment that occurs naturally. Humans as a species are a part of our outdoor world as much as deer, wolf or chipmunk. We have chosen to deny and "rise above" such ways of life ... I think that humans have become so overly confident in our own supremacy that when something like a hurricane or volcano occurs and reminds us that we're not so in charge of what happens, we panic. It's obviously fear for our lives and our safety, but it's also fear that suddenly something is out of our control. Being on this trip, similarly to the Killarney trip, and being completely at the mercy of the landscape and the weather, really showed me this ... I think it's important for people to be reminded of our own significance every so often.*

These experiences lead us to learn about nature but, more importantly, about ourselves in nature. To us, the teachers in Pursuits, this is a fundamental goal. In our opinion, this reconnection with the natural world is the key to overcoming many challenges in the future. Many discussions and debates regarding what lies ahead for the future occur in Pursuits. We consider issues surrounding locally grown food vs. imported food, concerns with monoculture farming practices, our overdependence on oil, and our need to re-align our decision-making practices with the aboriginals by considering the health of our planet first. Optimism reigns in all of these discussions as the youth need to also believe there is hope for the future. Our discussions can be critical but constructive and positive in nature.

Teaching an integrated program takes strength of heart and a real belief that the time and effort required is making a difference to the students in your program. It is important to remember this in the face of increased Board of Education approval processes, teacher colleague pressure for covering your classes that are left behind while you are on trip,



increased costs for transportation and equipment, and time away from your family and friends. This is not for the “faint of heart”. A supportive administration is critical to the success of any integrated program.

Because the students are together for the entire day in a semester, they also experience the stages of group development and begin to understand the importance of getting along. The semester begins and everything is great. Minor differences are quickly forgotten and the group progresses as a team. By mid-semester, however, conflicts begin to arise and petty differences start to slow the group’s progress. As teachers, we fully expect this to happen and do not prevent it from occurring. Students need to experience this and learn to communicate with each other to overcome their differences. With assistance, they have thoughtful discussion on how to improve the dynamic of the group. They begin to understand that the conflict arose because the group was acting like individuals and not as a team. Many times in the program, they are tested whether to make decisions based on their personal interests or the group interests. They see first-hand how easy it becomes to work in harmony with each other when each student puts others first. Research has shown that the activities that have the most affect on people’s happiness are ones that made a difference to others: to give of ourselves not for personal gain but for the greater good of others. While on trip, many students remark on the ease of the most difficult portage for that day because of the group’s ability to work together as a team. One student helps someone else and, before the end of the portage, everyone seems to be giving more effort. These moments are best captured around the campfire at the end of the day. Each group member will share a “rose” or highlight of the day and a “thorn” or low-point in the day. “Roses and Thorns” can be a very powerful time for students to communicate new learning but also a difficulty or concern they have with the group. Everyone in the group is paying

closing attention and this sharing is an essential part of the group cohesiveness and success while on trip for both students and instructors. At the end of the trip, the students are then asked to choose one memorable moment that they can write about and share with the class upon returning to the classroom. These memorable moments must not just be a new learning or understanding to help them on future outdoor trips, but a deeper understanding that can be extended to their everyday lives.

Emma, also a Grade 12 student from Pursuits 2012, states:

*With Pursuits, the experience is very much about the new; new equipment, new people, new experiences, but really we are doing something quite old. Just surviving as a group in the wild; walking, paddling, cooking, talking and sharing a phenomenal experience that used to be so commonplace but now is few and far between, if ever. Our culture has moved so far away from the way we used to be that silence is unheard of and “alone time” rarely ever happens. There are always responsibilities, duties we have to perform, people we have to meet. I haven’t spent an hour to myself like this since July 2011. I wonder now why I haven’t made the time. On trip, I feel very much apart from people, from our culture. Our race is so detached from what sustains us, from what we need. I know I act differently from how I would in the world of people; I think differently, speak differently because everything in nature is calmer, slower to change than our whirlwind society. My classmates and I have grown up in the country and have never known anything else but still we can be separated from it so completely. We rely heavily on technology, on our cars and classes, phones, mp3s, televisions, video games but, when out in the wild, I don’t miss any of it. Out here, we are so different from the human race but I feel so*

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*much more human than I have ever felt. More alive than any screen can ever make you, more true to myself than any song. I hope that once Pursuits ends (it has to, all good things must), I can carry on living, truly living, throughout my lifetime but I do fear I will lose it. It is so easy to forget what makes us but then again easy to slip back into the ways of our ancestors again.*

It is reflections and insight from students like this that make teaching outdoor education a joy. No classroom inside a school, no discussion or lecture can impart this type of learning. We believe that the graduates of Pursuits have an advantage over others in that they have become more aware of the issues and have

strategies and skills to provide positive meaningful leadership to others. Pursuits students seem to gain more perspective and confidence from their experience which allows them to face challenges head on, to overcome them with strength of heart.

Personally, I have now been involved in integrated programs for 13 years of my 27 years of teaching. For the last 8 years in Pursuits, I can easily say that I feel I have made the most difference to the students that I have taught. My colleague Ian Carr and I believe that these experiences and lessons give students an advantage for the future and would not happen as easily without participating in an integrated program like Pursuits.

*After being inspired by Professor Bob Henderson at McMaster, Rich continues to teach Outdoor Education to students in the Bluewater District School Board. He also has the joy of teaching guitar to the students at Georgian Bay SS in Meaford in the day and being a “rock star” as a member of “Bored of Education” at night.*



## **RBG ECO Studies**

*Aldershot High School, Burlington, Halton District School Board*

**By Jason Blair**

Program Website:	ecostudies.ca
Target Size of Group:	22
Nature of Students:	University and college-bound students
First Year Offered:	2007
Time of Year Offered:	February - June
Time of Day Offered:	Daily, full day
Frequency:	Annually (dependent upon numbers)
Home Population:	475
Other Schools:	This program is offered regionally to HDSB students
Additional Course Fee:	\$350 – \$500 dependant on funding (pays for adventure trips)

### **Credits Offered:**

- SES4U: Science: Earth and Space Science
- CGR 4M: Geography: Environment and Resource Management
- NBE 3U/C: Aboriginal Voices
- PAD 3O: Physical Education: Outdoor Activities

### **Major Outdoor Experiences:**

- 3-day Bruce Trail Hike
- 5-day Killarney Canoe Trip and Lake Study
- 3-day camping trip to Bruce Peninsula

### **Leadership Opportunities:**

- Facilitate ECO Rangers environmental leadership program for Grade 7-8 students at RBG
- Undertake several environmental awareness campaigns
- Engage in local habitat restoration projects

### **Other Key Elements:**

- Outdoor classroom at Royal Botanical Gardens (RBG) Arboretum (3 afternoons per week). This 1000+ hectare natural area includes access to a diverse variety of ecosystems including Carolinian Forest, Great Lakes St. Lawrence Forest, Boreal Forest, Oak Savannah, Tall Grass Prairie, a provincially significant wetland (Cootes Paradise) and the Niagara Escarpment World Biosphere Reserve

### **Major Challenges:**

- Attracting students from neighbouring schools

### **SHSM Environment Certifications Earned:**

- Standard First Aid
- Green Check GPS
- Leave No Trace Camping
- ALTITUDE Leadership

## **A Sense of Community & Self**

I started on a journey to become an experiential educator over 30 years ago. I grew up in a small town on the Bruce Peninsula called Lion's Head. Out my front window, I could see the towering cliffs of the Niagara Escarpment plunge into the crystal clear blue water of Georgian Bay. Beyond my backyard lay over 100 acres of pasture, woodlots and rolling hills that comprised my grandparents' farm. Across my front lawn lay the venerable Bruce Trail. Then, throw in for good measure a father who pioneered one of the first multi-credit outdoor education programs in the province and the stage was set. However, like most youth, I was largely oblivious to the significance of my surroundings and figured I would end up being an engineer or maybe a doctor. Being a teacher like my dad, no way.

Fast forward a few years into high school and things start to become clearer. I was lucky enough to have one of the most dynamic and engaging science teachers who, like my father, had a keen interest in getting kids outside. We blasted off model rockets in local farmers' fields, marched along the Bruce Trail stopping to undertake water quality tests on local lakes, and camped out under the stars to count meteors. Finally, in Grade 13 Chemistry, we set out on a four-day expedition to Nellie Lake in Killarney Provincial Park. As an 18 year-old who had grown up camping and canoeing, largely on the Bruce Peninsula and in Algonquin Provincial Park, none of these experiences had prepared me for the profound way that Killarney was able to touch my mind, body and soul. Suddenly, I knew why what I was learning in class made sense and had in the process stumbled across my "Zen" place. Like many environmental educators, this one pivotal experience came to encompass the core of my educational philosophy: build relationships, provide the tools necessary for understanding, engage students using real, relevant and meaningful examples, light that

inquisitive spark, point them in the right direction, and then sit back and watch the fireworks.

The RBG ECO Studies program is my attempt to meld four days of experiential education in Killarney with six years of post-secondary Earth and Environmental Science (BSc. and MSc.) into a one-semester integrated program. For anyone who has never had the opportunity to teach in an integrated experiential setting, it is truly an educational experience unlike any other. As teachers, we all try to engage, to make our subject material "interesting" and to try to give each student the opportunity to learn in a way that meets her/his individual needs. Occasionally, you are able to build rapport with a student and feel like you have truly made a connection that will have a lasting impact. However, when teaching students for 75 minutes each day and a total of 90+ students for a semester, it is truly a challenge to build meaningful relationships with each student or for the students to build new positive relationships with their peers.

Now, picture an educational setting where you have the time to get to know all your students because you spend the majority of each day with the same group of 22 students. Where you can foster a supportive collaborative approach to learning that is free of the baggage and conflict that is omnipresent in most high school environments. Then, factor in a group of like-minded students who show up each day ready to learn something new. Give them a chance to drive their own learning and, all of a sudden, the right components are in place for students to be part of something that is larger than they are. Lastly, give the group opportunities to undertake outdoor experiences together, to build relationships, to build trust, to learn about each other's strengths, weaknesses and, most importantly, push their individual limits so that confidence



blooms and a recognition of their potential begins to develop.

School becomes more than a classroom; it becomes a community. Community is the key. It never ceases to amaze me that, in retrospect, almost all students who participate in ECO Studies point out the sense of community and the relationships that they make with peers and teachers as the single most valuable part of their experience in the program. The ECO Studies community is no accident. Our community is carefully crafted from day one of the semester. Before diving into any environmental theory or scrap of earth science wisdom, the class is led through a series of team building initiatives that oblige cooperation and begin to build the foundation of trust. True community is a powerful force. It motivates people to do things they would not be inclined to do for themselves and, for some, it provides a sense of belonging that has largely been absent from a high school social environment that is all too often more exclusive than inclusive. Once the foundation of trust is laid, it is then possible to push the group into increasingly more challenging situations that further strengthen leadership capacity and foster collaboration. At the end of our first week of class, our team building climaxes with a high ropes experience. Nothing builds real trust like allowing a classmate to hold on to your belay line as you scale a 50-foot

Jungle Gym. The remainder of the semester is designed to provide a succession of challenges that allows the group to put into practice the leadership skills and classroom theory discussed and demonstrated earlier in the semester. Like many outdoor programs, these experiences culminate in a series of multi-day outdoor adventure trips that take place during the final month of the program.

Without a doubt, all students who participate in ECO Studies or other integrated experiential education programs share at least one thing that is potentially more valuable than the great breadth of knowledge they have attained, the leadership capacity that has been built and the unique and engaging outdoor experiences they were lucky enough to partake in with the positive support of a community of like-minded learners. That one thing, the thing that leads students and parents to declare the experience as “life changing” or “transformational” lies in the confidence of finding out where you want to go in life. A strong sense of self, developed through pushing one’s mental, physical and social limits is simply invaluable. Many students feel that the experience has resulted in a profound change in who they are. I always challenge this notion as I feel that experiential education does not hold the power to “change” someone but it most certainly holds the power to let each student find who (s)he really is.

*Jason has been a teacher at Aldershot School in Burlington since 2004. In 2006, he developed the integrated Earth and Environmental Science Program, RBG ECO Studies. Jason is passionate about experiential education, committed to getting students out of the classroom and inspired by the natural world. Away from the classroom, he enjoys undertaking many outdoor pursuits with his family and two crazy dogs.*

**Parental Perspectives on RBG ECO Studies:**

*I feel that the program was a very valuable experience for my son. In fact, I would say that it was a turning point in his high school education. It was during this program that he became more engaged in learning and discovered many of his valuable skills. I think the group dynamics and hands-on approach taken assisted in developing interest in the subject as well as instilling confidence in the kids involved.*

*I couldn't let the school year end without a message acknowledging the outstanding success the ECO Studies program was for our daughter. Her outlook for second semester was quite bleak, anticipating months of classroom work and then sitting at home afterwards to complete assignments but, after switching into your curriculum, she turned a complete 180 degrees. She finished refreshed for the important final year. The course material was engrossing, relevant, and the teamwork actually "worked". I feel that the students felt respected and appreciated, making them try harder, be more committed, and even validating the course material. Our daughter now has knowledge to help the environment, and a great desire to do so. In fact, she was so excited she would frequently "teach" us her new information, which hasn't happened since Grade 5!*

**Student Perspectives on RBG ECO Studies:**

*I wouldn't have got anywhere after high school without Eco Studies. Not only did Eco Studies point me in a direction that was right for me, the program gave me the tools to succeed in university. People think that education is all about academics and that's a huge part of it but, in Eco Studies, there are skills you learn in between the curriculum and those are the skills that are going to give you a competitive edge later in life.*

*In Eco Studies, we learned how to be cohesive group members. We were classmates but in our hearts we were something more. Eco Studies was important to us and it still is; it was formative. While relating with other people on a level we had never experienced before, we learned how to be ourselves. Eco Studies was comfortable, it was fun, it was where I met some of my best friends. Eco Studies taught me how to work with others and I don't think there's a university program or job that doesn't value those skills. If you undervalue them, you're doing yourself a disservice. If you nurture those skills with programs like Eco-Studies, well, you're going places.*

*The most important part of this program is the friends you'll make along the way. I remember laughing until it hurt in tents on the Bruce Trail, the girls yelling at us because they were trying to sleep but we just couldn't stop. We had fun, we got to be kids, something that means even more to me now that I'm older. For one semester, we got to escape from an education system that was turning us into robots. We were humans, dam it. We played and loved and shared passions. We didn't piss away our youth; we had a blast and we learnt a lot. I can still remember Mr. Blair's lessons on eutrophication but I think that pales in comparison to the learning we did when the sun went down and we were left alone to talk in our tents. I couldn't tell you what we talked about but it was important because we were together. We had adventures. We became adventurous.*

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## **Outdoor Education (ODE)**

*Dr. J.M. Denison SS, Newmarket, York Region District High School*

**By Amanda McGowan**

Target Size of Group:	24
Nature of Students:	College or university-bound
First Year Offered:	2006 ... credit package has changed from year-to-year
Time of Year Offered:	Second semester
Time of Day Offered:	Daily, full day
Frequency:	Annually
School Population:	950
Additional Course Fee:	\$400

### **Credits Offered:**

- ENG 3U/ENG 3C: University/College Level English
- PPL 3O: Physical Education: Elective Healthy Active Living
- Grade 11 Co-op: (2-credits)
- PAD 3O: Physical Education: Outdoor Activities
- ENVL 264: Greenhouse Operations (dual-credit with Seneca College)

### **Major Outdoor Experiences:**

- 4-day winter camping experience at a local Scout Camp where students build winter shelters and sleep outside
- 4-day backpacking experience in Algonquin along the Highland Backpacking trail
- 4-day canoe trip in Killarney

### **Leadership Opportunities:**

- Teaching outdoor education programs linked to science curriculum of Grades 5-8 at local elementary schools
- Assisting with facilitating education stations at the York Region Children's Water Festival
- Planning and facilitating the Husky Olympics, a spirit and athletic event at our school
- Assisting with campsite and trail maintenance with Ontario Ministry of Natural Resources while on trips
- Partnering with the Lake Simcoe Region Conservation Authority and Adopt-a-Stream program to assist with local stream restoration and tree planting projects.

### **Major Challenges:**

- Declining school population,
- Students devoting an entire semester to elective credits
- Funding

### **Integration of Specialist High Skills Majors:**

- SHSM Environment: students achieve necessary 2 co-op credits, English and PAD30 Outdoor Activities



**SHSM Environment Certifications Earned:**

- First Aid/CPR C
- Knots as part of PAD30 curriculum
- Green Check GPS
- ORCKA Canoeing Flatwater A
- WHMIS
- Animal/plant management, Seneca Greenhouse Operations Course
- Species identification, Seneca Greenhouse Operations Course

**From Experience to Practice: An Integrated Program Where Students Become the Teachers**



*Tell me and I forget, teach me and I may remember, involve me and I learn.*

*Benjamin Franklin*

I consider myself one of the lucky ones because I have always known what I wanted to be when I grew up. While my peers struggled to find their interests and strengths and figure out what they wanted to do, I have always been certain that I would be a teacher. During my Grade 12 Outdoor Leadership class, I discovered that teaching and the outdoors could be combined to create an inclusive, unique, and transformational learning environment. It was then that I made the decision that I would be an Outdoor Educator.

Seven years later, I am now the Outdoor Education teacher at my former high school. Today, I often find myself wondering, “What would I be doing if I hadn’t taken Outdoor Ed?” Many students enter my course thinking they are not capable of school; they leave Outdoor Ed feeling empowered and more aware of possible career paths. I believe this not only has to do with the outcomes of outdoor education pedagogy, but also because of the unique package of credits students receive.

The Outdoor Education course has evolved from a one-credit offering (what I personally took when I was a Grade 12 student) to a much more expansive and impactful collection of six

credits. Formerly known as the Outdoor Adventure Leadership program, the new version is now known simply as Outdoor Ed or “ODE” as the students so aptly call it. For the purposes of this article, I shall highlight the two-credit co-op, the Outdoor Activities credit, and the college dual credit that varies from year-to-year depending on community college course offerings: this year, students are completing Greenhouse Operations at Seneca College. There are a total of eight teachers involved in the teaching of this program: the college instructor; the English teacher; four Physical Education teachers responsible for the Senior Elective PPL30; myself responsible for the 2 co-op credits, PAD30 and overnight trips; and an Art teacher who is the male chaperone for our overnight trips.

As part of the Specialist High Skills Major for the Environment, ODE students receive sector-specific training as listed in the above template. The partnership with SHSM is important as it provides funding to subsidize the cost of these certifications and transportation for Reach Ahead programs that include our semester-end canoe trip.

SHSM funding also assists with equipment purchases and, as such, students are able to borrow gear they do not own for trips and it can also be used in our co-op placements. The SHSM component not only plays an integral role in funding, but also in the career exploration that takes place because students must complete two cooperative education credits to fulfill SHSM requirements.

To me, teaching is about the holistic development of the student; it is about everything from Mathematics to Music to maturity to self-awareness. Teaching is about empowering all students to reach their full potential, and about creating a learning environment where all students, no matter their learning style, can gain the confidence to be themselves. I truly believe that ODE continues to interest students at Denison

because it is a learning environment in which *all* students can flourish and succeed.

Often, before the semester starts, I am asked about my class list. Some teachers will comment on behaviour issues with certain students. When I speak with those same teachers later on in the semester, the individuals they had issues with are now flourishing in my course; I do not experience the same behaviour difficulties because most of our daily lessons take place outdoors. In addition, students get to take part in three trips, each lasting four days and three nights: winter camping, backpacking, and canoeing. Now, that is not to say that every behaviour challenge disappears, but I believe that nature calms most of these students and being active outdoors releases pent-up energy they would have acted upon differently had they been indoors.

My primary responsibility is for the cooperative education credits students complete. This is what weaves together and integrates the package of courses. In 2012, it was decided the program would include one co-op credit and that it would partner with the SHSM Environment. In 2013, I started teaching this new program and quickly realized the barriers to finding a co-op placement where all 24 students could attend at once and complete their required hours. Fortunately, I was able to develop partnerships with several local organizations. This year, it was decided that the students would complete a two-credit co-op so as to more easily meet the SHSM requirements. The key to securing co-op placements for an entire class is to seek outfits that need work to be done with a lot of helping hands. Most local environmental organizations were unable to support us as they only had four employees themselves but, after some persistence, I was able to find sustainable partnerships.

The co-op placements vary from single day to week-long projects with six different organizations. As part of these placements,

students complete hours on trip performing trail maintenance and campsite clean-up through the Ministry of Natural Resources Adopt-a-Site program. In addition, students assist York Region Municipality with tree planting days through the Adopt-a-Stream-Crossing program (planting trees specifically at stream crossings); they also assist with facilitating the annual week-long York Region Children's Water Festival. In collaboration with Ontario Streams, students assist in restoration projects at a local location where they are able to put into practice their knowledge gained in the college dual credit. Finally, students design environmental programs linked to the science curriculum for Grades 5-8 pupils at nearby Denne Public School. ODE students plan, design and teach programs linked to the curriculum by drawing upon the knowledge gained in the college course as well as their experiences in PAD30 on trip and in class. This transformational experience helps students reflect on their own learnings in the Outdoor Ed course and fosters active experimentation to test out their newly acquired knowledge.

The co-op placements offer students the opportunity to explore careers in the environmental sector that are of interest to them. In the end, not all students discover they want a career in the environment. However, most determine important characteristics of their future careers. For example, some learned that they would like to have a job outdoors, being active, working in a team setting, and "not being stuck behind a desk in an office all day". In other cases, students discovered that teaching is something they would like to pursue as a career.

In the eyes of students, the trips are the pinnacle of the semester, and I do not dispute this fact. The Outdoor Activities credit is the reason we are able to take trips where students participate in a variety of recreational activities. It is exciting for me to see the growth in the community of our class. On our first trip,

students work individually and have disagreements because not everyone is pulling equal weight with chores. By the last trip, most students are volunteering to assist others and work together to accomplish a common goal. There are times when certain individuals continue to think only of themselves but, for me, it is important to focus on those who experience growth. For some students, the trips are appealing because of the physical and emotional challenges they get to overcome. For others, it is their first time camping and they are excited to experience all that the outdoors has to offer and to overcome their fears of being without electronics and surviving in the wilderness.

Finally, the community college dual credit gives students college experience prior to selecting their desired post-secondary destination and it relates closely to the SHSM Environment component. Last year, students completed Environment and Natural Resource Studies at Fleming College. In the course, students had hands-on experience with species identification, tree and twig identification, tree inventory and measurement, birds of prey identification, wetland and benthic invertebrate studies. After this course, students engaged in a week-long June co-op placement where they used the knowledge learned in the college credit to design environmental programs for Grades 5-8 linked to the science curriculum. Students initially didn't realize how much they had learned in the Fleming College course and that they were putting it to immediate use by teaching the elementary pupils and answering their questions. It is through this co-op placement that the students become teachers and they learn how their actions and behaviours as students may have been perceived while on trip or in a classroom. To me, this is the most powerful co-op placement because they realize that not every student is attentive when the teacher is talking and not every student follows all the instructions in a game. It is after this co-op



## *JOURNEYS into RELATION*

placement that I see a drastic growth in maturity and confidence in the students; they feel accomplished to have taught younger pupils about the environment and outdoors. They feel like leaders.

The underlying values of the ODE program are community, leadership and adventure. It is through the co-op, outdoor activities, and college dual credits that these values are fostered. These values are further reinforced while on our three trips. The community that is

created in ODE teaches students how to work collaboratively and problem solve; the leadership opportunities through their co-op placements teach them important communication skills as well as how to be role models; finally, the trials and challenges students overcome while on our adventures develop their confidence and self-efficacy. After a semester in ODE, students feel changed and wish there were more semesters of Outdoor Ed. They are prepared to take on the trials and challenges of Grade 12 and life after ODE.

*Lifelong learner dedicated to the pursuit of knowledge and dreams, Amanda is a free spirit, culinary arts wannabe, lover of all activities outdoors and an outdoor experiential educator with the vision to make the world a better place. To the best of her knowledge, she still holds the record for the longest flight time (25 seconds) in the Grade 6 paper airplane design contest at Canadian Martyrs P.S. in Newmarket, Ontario.*





## The Program

*Pauline Johnson Collegiate, Brantford, Grand Erie District School Board*

**By Tom Sitak**

Website:	<a href="http://www.pje3.ca">www.pje3.ca</a>
Target Size of Group:	23 students
Nature of Students:	Mainly university & college-bound students
First Year Offered:	2011
Time of Year Offered:	Second Semester
Time of Day Offered:	Daily, full day
Frequency:	Annually
School Population:	900
Other Schools:	North Park Collegiate, Brantford Collegiate Institute. St. John's College
Additional Course Fee:	\$250

### **Credits Offered:**

- SBI 3U/3C: Science: Biology
- SFE 38M: Science: Field Ecology
- CGR 4M: Geography: Environment & Resource Management
- PAD 4O: Physical Education: Outdoor Activities

### **Major Outdoor Experiences:**

- 4-day canoe trip in Massasauga Provincial Park
- Skiing/Snowboarding
- Electro-fishing, Trout Egg Collection
- Climbing, Caving, Geocaching

### **Leadership Opportunities:**

- Teaching an outdoor/environmental program for Grade 7 feeder school students
- Teaching Grade 4 students at the annual GRCA water festival
- Earth Day Presentation to Brantford City Council

### **Other Key Elements:**

- Trip to Marine Aqua Lab at the University of Guelph
- Community stewardship (Earth Hour, Grand River clean-up, tree planting)
- Paddle carving
- Six Nations tour

### **Partnerships:**

- Grand River Conservation Authority (GRCA)
- MNR Guelph District
- City of Brantford Parks & Recreation
- Laurier University, Brantford campus

**Major Challenges:**

- Contextualized Learning Activity delivery by Math & English teachers
- Completing the SHSM co-op component now that students are limited to 34 credits max.

**SHSM Environment Certifications Earned:**

- CPR/First Aid, WHIMIS
- GPS + Map & Compass
- Habitat restoration, watershed management, species identification
- ORCKA canoeing techniques Level One Flatwater
- Leave No Trace

## **Ecology, Environment & Education**



Many teachers will tell you that there are moments during their career when a lesson, activity or even an idea comes to them and they just know that they are doing something very meaningful. Something that motivates, fascinates, teaches life skills, something that instills respect and good character, something that even stirs emotion. This is when teachers just know they are doing the right thing. Such an epiphany came to us four years ago when we first initiated the  $e^3$  program at Pauline Johnson Collegiate.

The idea to start an integrated curricular outdoors program did not just happen over night. It came as an evolutionary result of years of taking students outdoors to learn, and years of trial and error to get the right mix of nature learning, community stewardship and fun. Early in my teaching career, I had the privilege of working with Gerry Rand (now a retired teacher). Together, we took high school students outdoors to participate in community stewardship projects. At the time, we involved our students in the rehabilitation of D'Aubigny Creek in Brantford. When I run into former

students, one of the first questions they always ask me is if we are still going out to D'Aubigny Creek. It seems that this experience left a lasting impression on them.

I first learned about Specialist High Skills Major (SHSM) programs a few years ago at the Canadian Ecology Centre in Mattawa when completing my Environmental Science teaching specialist. SHSM programs are an excellent vehicle to fund and deliver focused integrated curricular education, and a program that focuses on learning about the environment outdoors seemed like a perfect marriage. After visiting a couple of other local outdoor education programs, we sat down and hammered out a model that we thought would work for the students at our school.

And so, with the help of my teaching partner Shawn Devine, the SHSM e<sup>3</sup> program was born. The “3 e’s” symbolize ecology, environment and education, with the primary goal of getting young people outdoors to learn. We packaged together four senior high school courses, related to the environment, to give us the flexibility to take a group of students on over 30 field trips.

One of the key features of the program is a partnership between our school and the Grand River Conservation Authority (GRCA). The GRCA provides a beautiful outdoor classroom venue, the Apps Mill Nature Centre, for our students to do the majority of their outdoor learning. Duane Brown and his co-workers at Apps Mill aid in the delivery of the environment-related certifications, a mandatory SHSM requirement. Watershed management, GPS, species identification, habitat restoration and ORCKA canoeing are all delivered by the GRCA. The students are taught each certification in an experiential manner whereby they are not only gaining knowledge, but they are also given opportunities to learn new skills and practice them. Students are also exposed to professionals and experts in the field and have to pass a test to achieve each

one. During the process, we also visit other conservation areas in the watershed, the GRCA headquarters and the University of Guelph marine biology lab. This partnership ensures that students are exposed to a wide variety of experiences all related to obtaining industry-recognized environmental certifications.

*It is a great program because you learn hands-on about the environment. You also learn life skills that challenge you. All the certifications look good on a résumé.*

*Bryce Frost (Grade 11 student)*

Another longstanding outdoor experiential learning activity that science students at Pauline Johnson have benefitted from is maintaining a live trout hatchery in our classroom. This project has been done for over 20 years at our school and now has become one of the staple activities of the e<sup>3</sup> program. To obtain trout eggs, our school is grateful to Ken Cornelisse and Art Timmerman of the Ontario Ministry of Natural Resources (OMNR). They routinely take the time each semester to lead our students to Young Creek, a cold-water tributary of Lake Erie. Under their direction, students aid in the live capture of spawning trout by electrofishing. Eggs are harvested from a pregnant female, artificially inseminated by a male and then, once fertilized, are brought back to our classroom hatchery for development. After hatching, they are returned back to the creek. This activity allows students to study environmental biology up close and personal. They handle the fish, take care of the eggs, and observe the fetal development. They also learn about a cold-water habitat, the necessary requirements for successful spawning and human impacts on the Young Creek ecosystem. Most students become attached when caring for the eggs, which increases their interest and passion for learning.

Community stewardship work has really been the backbone of environmental education at Pauline Johnson Collegiate for many years.

Each year, the e3 program includes tree planting, a Grand River clean-up and other habitat rehabilitation projects such as removing the invasive Japanese Knotweed from the forest area at the Apps Mill Nature Centre. Later this year, our students will assist the MNR in a trout population study at D'Aubigny Creek in Brantford. This type of work adds real value to their education since the students are learning about human impacts on natural environments in their own neighbourhood, and then are given the opportunity to help reduce the impact. It becomes something they are proud of, something they can look back on that says, "I made a difference".

Our students are also given opportunities to teach youth about the environment. Grade Seven students from our feeder schools are invited to Apps Mill and the e3 class becomes their teacher by running outdoor activities for them. This provides a leadership component that builds confidence and promotes character development.

By far the highlight of the e<sup>3</sup> program for students is our 4-day canoe trip to the Massasauga Provincial Park. This trip with their friends away from city life is an experience that they look forward to all semester long. From an educational point of view, there is no better culminating environmental learning experience than a backcountry trip. Students get the opportunity to practice skills such as paddling techniques, building a campfire and setting up a tent. They also prepare their own meals, filter water to drink, and monitor their waste; all accomplished by practicing "Leave No Trace" principles. And they have to do all this by working together. They learn that no one person is more important than the group.

Just spending time at night under the stars and away from civilization permits youth to experience and appreciate nature on a whole new level. They learn that clean fresh water

should not be taken for granted. They learn that human waste needs to be properly disposed, and they learn that humans are part of the ecosystem, not an outside entity. We hope that this experience not only builds self-assurance, but also connects them to nature so that they gain a lasting respect for the Earth's resources and natural systems.

Outdoor activities invite active participation because they naturally lend themselves to having fun. Kids love to play in water, poke at a campfire, and play outdoor games. The program includes activities such as skiing/snowboarding, horseback riding, archery, wall climbing, swimming and bike riding. We also play games such as predator-prey, capture the flag, and even introduce them to geocaching. This year, we are introducing paddle carving which not only enables them to work with their hands to craft a keep sake, but also allows them just to do something fun and unique.

Another equally vital aspect of the e<sup>3</sup> program is to work at building a family-like atmosphere. An important facet to any family is that each individual feels a sense of attachment to the whole group. This sense of belonging makes students feel like they are part of something special. Group work is encouraged for almost every activity that we do. Spirit wear is available which makes them feel like they are part of a team. We also have a geocache box hidden in a secret location in the Massasauga Park. The coordinates of the geocache are not published and are only known to e<sup>3</sup> students. On the year-end canoe trip, each class is given the coordinates and has to find the box using a GPS. Then they are permitted to leave something in the box; a letter, a picture, a memento of their class and their experience. In this way, students from year to year connect with each other. Most are fascinated by what they find and leave everything from humorous artefacts to funny stories about their teachers. One student even left a special e<sup>3</sup> hand-made



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fishing fly in the box. These activities reinforce that the students are part of something special.

*The e<sup>3</sup> Program builds friendships with people I never thought I would be friends with. It's like a family.*

*Abby Smith (Grade 11 student)*

The integrated course structure of the e<sup>3</sup> program provides the framework to teach kids in meaningful ways. It has allowed Shawn and I to work with one group of students all day, every day. It helps us to build more significant relationships with students simply because we are spending more time with them outdoors in a less formal setting. These experiences have taught me the value of making teaching real and hands-on. This type of education is

something that we have never lost sight of at Pauline Johnson, and I believe it is immensely important in the character development of young people.

First Nations' elders speak of how we must look seven generations ahead in all our actions. They advocate that, when we walk upon Mother Earth, we plant our feet carefully because we know the faces of our future generations are looking up at us from beneath the ground. This spiritual prophecy holds tremendous value for all of us when looking forward. As adults, it is imperative that we are good role models for children. We must give them unique opportunities to reconnect with nature. It will foster self-esteem and optimism.

*Tom has been a Science teacher at Pauline Johnson Collegiate for 25 years. At school, he enjoys coaching and being one of the staff advisors for the Eco-club. In his spare time, he likes to play hockey, snowboard and do a little woodworking. He also enjoys coaching his own children, most recently in hockey and baseball. In the summer, he is passionate about spending time outdoors fishing, boating and hiking with his family at their cottage in Restoule, Ontario.*



## **Lifelines**

*Centennial Secondary School, Belleville*  
*Hastings & Prince Edward District School Board*  
**By Candice Stuart**

Target Size of Group:	16-18
Nature of Students:	Mainly college-bound students; at-risk students
First Year Offered:	2001
Time of Year Offered:	February-June
Time of Day Offered:	Daily, full day
Frequency:	Annually
School Population:	900-1000
Additional Course Fee:	\$250 plus a commitment to fundraise an additional \$250

### **Credits Offered:**

- NBV3C: Aboriginal Beliefs, Values and Aspirations
- SVN3E: Environmental Science
- CGR4M: Geography: The Environment and Resource Management
- PAD4O: Physical Education: Outdoor Activities

### **Major Outdoor Experiences:**

- 4-day winter camp
- 4-day bike tour
- 5-day paddle clinic, camping overnight at Camp Trillium, West Lake (evening programs include canoe theory and No Trace Camping workshops)
- 4-day mixed (camping) programming (canoe camping in the Peterborough area; each day is a different program, including Canadian Canoe Museum, Voyageur Canoe workshop, paddle through the Lift Locks, paddling Eels Creek to practice canoe and map reading skills, Lang Century Village, visit to Curve Lake and Whetung's Art Gallery to meet with a local artist and discuss the residential school system, and a tour through Petroglyphs Provincial Park)
- 10-day canoe trip in Temagami

### **Leadership Opportunities:**

- Touring elementary students through and running the sugar bush at the local outdoor education centre
- Building a canoe with a local canoe builder
- Raising awareness on environmental issues within the school

### **Other Key Elements:**

- Local greenhouses (as we try to get our school greenhouse operational again)
- Local outdoor education centre (Frink Centre)
- Sir Sanford Fleming College (training opportunities and certifications)
- Camp Trillium (for canoe clinics and evening programs for ORCKA certification)

**Major Challenges:**

- Declining school population,
- Getting students through mandatory credits within 4 years
- Perception that the course is "camping 101"
- Getting through the curriculum as other real-life teaching moments arise

**SHSM Environment Certifications Earned:**

- Red Cross Standard First Aid
- Service Excellence (promotes good customer service)
- WHMIS (Workplace Hazardous Materials Information Systems)
- ORCKA (Ontario Recreational Canoeing and Kayaking Association) Basic Canoeing Level 1
- ORCKA Canadian Style Paddling Level 1
- ORCKA Canoe Tripping Level 1
- Professional Chainsaw Operator's Course
- Forest Firefighting SR 100

## **Environmental and Human Stewardship**



When I was in Grade 10, I came back from a five-day canoe trip where it had rained all five days. We were greeted by the head of outdoor education for the school board. I said hello, grinning from ear-to-ear. I remember him laughing at me and telling me that if I were still

smiling after all this rain, perhaps I should think about a career in outdoor education. I guess it stuck because here I am, 20 years later, leading high school students into wild areas with hopes that they, too, will come back grinning ear-to-ear.



I strongly believe that, if we are to create stewards of the environment, we need to allow students the opportunity to experience, acknowledge and appreciate the environment around them; how can you possibly want to save or care about something you have never been a part of? The focus of Lifelines, a four-credit integrated program, is environmental and human stewardship. Successful students enrolled in the program will receive credit in the Social Sciences, Science and Physical Education.

Lifelines was originally created 12 years ago. The intent of the program was to transition students from high school into post-secondary education or the workplace. Over the years, the program has evolved to fit the needs of the students applying and the general school environment. Lifelines is open to all Grade 11 and 12 students, though most who apply are youth-at-risk of not getting their high school diploma; these are the students who cannot sit still in class, who need to be tactile in their learning, who are better at being lost in the woods than in a book. Lifelines works for these students as its certificate-based, assessment opportunities are scaffolded and learning is experiential. Students will work towards a variety of industry-recognized certifications and set many goals related to communication, organization and team building. They will leave the program with a portfolio highlighting all of their successes.

One of the toughest parts of organizing and teaching Lifelines is making sure the curriculum expectations are met. The portfolios created by the students cover many of these expectations mainly due to the certifications they work towards. Assignments are also integrated to span multiple courses and disciplines. Each course has a final culminating activity built into the units of study, just as each course has two or three (major) separate assignments that are assessed for one credit but are created using

background information from all credits. We make Lifelines as integrated as possible by connecting all four credits. The best part of this program is linking the curriculum to authentic tasks that make assignments and tasks relevant in a modern context.

Students participate in a variety of different activities during the semester. Our first trip of the year is a winter camp where we explore an area close to the community, create snow shelters (varies from year-to-year depending on weather) and learn about the local flora and fauna during the winter months. After the March Break, we help run a local sugar bush and teach elementary students about making maple syrup; we also start making a cedar strip canoe at this time. Our next trip is a cycling tour of local farms and forestry operations in the area. We volunteer our time in exchange for first-hand knowledge of how these farms operate and land to camp on while cycling around. There are also a number of one-day trips that include indoor rock climbing, the Toronto Zoo, the Museum of Nature, and the Canadian Canoe Museum. This brings us into May and the canoe season where we spend a great deal of time on the water working towards our ORCKA certifications and preparing for our final culminating activity, a 10-day canoe trip in the wilds of Temagami.

Students learn a lot throughout the semester. The winter camp is the first big out trip where they must learn to work and coexist together. Sleeping in the snow can be tricky and there are certainly some incredible moments as students push past their comfort zone and try new things. This trip challenges the group to communicate better and become a team. Who knew that simply holding on to a rope and trying to get the entire class up a steep hill could be such an effective team building activity?

The sugar bush tours are also a highlight of the semester. As the teacher, I often feel nervous and not ready to have these teenagers



educate young children on how a sugar bush works, how maple syrup is made. Every year, I am pleasantly surprised as my unruly teens become articulate professionals guiding Grade Ones through the bush (this is not to say there have never been minor hiccups). My students grow up a great deal in those two weeks as they learn how to work together, to rely on one another, to push out of their comfort zone, to not worry about what others think, and to be flexible in their teaching. It is a real gift to watch. It is also amazing to see these sometimes tough youth-at-risk become big teddy bears with young children.

One of my favourite moments teaching this program occurred during a weeklong team-building trip. The class had hit a particular low that they could not seem to pull out of; students were bickering with one another and there was a strong undercurrent of bullying that I could not seem to put my finger on. We started working through a Full Value Contract (FVC), an exercise that was quickly becoming extremely painful. I decided to give the group a little time to discuss their issues, in a safe environment, without me present. Not much time elapsed before they proudly presented me their FVC. It was garbage; there was absolutely no integrity in what they presented, so I threw it into the campfire, told them I was disgusted with what they had come up, and asked them to start again in the morning. I excused myself and went to make a tea before bed, leaving my stunned students by the campfire. I returned about twenty minutes later and found them all standing around the fire, sharing stories, talking and really opening up. Then and there they created their FVC which they honoured with integrity for the remainder of the year. The entire class attitude changed with that one event and the real hero to that story was the student who was being bullied as he led the group through the best FVC I've seen to date.

The final culminating activity for this class is a ten-day canoe trip into the wilds of

Temagami. During this trip, the students bring together all that they have learned through the semester, including map reading, compass work, tree identification, leadership, and bush craft; they also incorporate much traditional native knowledge while looking at old and historical cut sites (forestry). Students also work on their ORCKA Canoe Tripping Level 1, practice proper wilderness protocol and take part in an aboriginal ceremony with the Anishnabe (Ojibwa) of Temagami, when timing works out.

The ten-day canoe trip can be quite overwhelming for most students, as this is the longest they've been away from home and most have never traveled to a place like Temagami before. There is a little bit of "hand holding" over the first few days as I model for them expected behaviours and protocols. By the end of the trip, they are leading it themselves, often serving breakfast to the co-op students, chaperones and myself. The students come back from this trip with a sense of accomplishment, perseverance, independence and adventure. This trip is a defining moment for them as the potential hardships of canoe tripping tend to be for most.

One of the best things about this program is the flexibility to teach to all of the different learning styles. Students that normally feel alienated in the traditional classroom are able to experience success because of this unique approach to learning. Hands-on learning allows the students the opportunity to try something until successful in a safe and supported environment. This also sets the student up for a higher level of achievement when pursuing postsecondary education in an outdoor field, such as the Fish and Wildlife program at Sir Sanford Fleming College, Outdoor Pursuits at Algonquin College or COLT/ WILD en route to becoming a wilderness guide with a company such as Black Feather.

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Many Lifelines graduates are busy in the field of environmentalism, some at university, some at college, some doing water sampling in Alberta at the Tar Sands, and others involved in wilderness guiding with Black Feather, where they continue to promote environmental stewardship.

Many colleagues wonder where the energy comes from to run a program like Lifelines. The answer is simple: the students. There is nothing better than watching a group of strangers become a family, to learn to work together and discuss respectfully tasks presented both in and out of the classroom. These students “buy into” the program and

make it theirs. This naturally lends itself to creating a group of environmental stewards. I have found that once you take students (and adults as well) into wilderness areas, remote or not, they learn to appreciate these spots and will do what they can to help preserve and protect them. This provokes a higher level of thinking, great discussions and a call to action. The call to action is at the centre of Lifelines because we are all here to be doers. Through knowledge and understanding, I hope that I can sway their actions to be positive and forward thinking.

LIFELINES is not for the faint of heart, but for those with heart.

*Candice has been teaching Lifelines for the past 12 years. She also teaches Geography; First Nations, Metis and Inuit Studies; Science; and History. During the summer months, she guides sea kayaking and hiking trips in the Arctic for Black Feather, a Canadian wilderness adventure company. Personal travels have also taken her to Iceland, Southeast Asia, Africa and Central America.*



**Student Testimonials: How Lifelines Changes Lives**

*Before enrolling in Lifelines 2011, I had almost no outdoor experience. Sure, I had a love for nature and being outside, but I had never gone backcountry, camping or “roughed it” in any way. In fact, prior to this course, I had only been in a canoe once. Looking back now, I am so glad I took this class. I am now working as an apprentice guide for Black Feather, one of Canada’s best guiding companies, and I am working my way up to becoming a lead guide.*

*The certifications earned in Lifelines include: Red Cross First Aid and CPR, WHIMIS, Professional Chainsaw Operator’s certificate, and ORCKA Level 1 Canoe Tripping and Basic Canoeing. This is just to name a few but all certifications look great on my resume aimed towards a career in outdoor tourism. Plus, the credits I earned, such as Native Studies, Environmental and Resource Management, Environmental Science and outdoor activities, contribute to a well-rounded transcript. But I took so much more from this course than certifications and grades.*

*Lifelines is a completely different learning environment that you will not find anywhere else at Centennial SS. My classmates became my family. We learned to support one another as we pushed each other to reach our full potential. I learned invaluable skills such as communication and leadership. I learned that I was stronger and more determined than I had ever known. I became open to new experiences and gained an entirely new outlook on life. I have never heard a single person say they regret taking Lifelines, and I promise any future students that they will not regret it either.*

Erin

*My experience in Lifelines has left a lasting mark and I often find myself wishing I was still a part of the course. It has been four years since my involvement in Lifelines and I am now completing my final semester of an Honours B.Sc. in Wildlife Biology at the University of Guelph; I will be attending Sir Sanford Fleming College for their Fish and Wildlife program in the fall. In my experience, flexibility is a skill not widely taught, but is an aspect that any good camper knows, and one which I use daily. As a Science student, hypotheses and predictions don't always work out, flaws in experimental design are realized part way through experimentation, field equipment gets left behind, and improvisation is required to get the job done. That flexibility is a skill as is teamwork, both of which I acquired during Lifelines. Science nowadays is rarely a solitary practice, and I am grateful daily for the opportunity Lifelines offered to solidify who I am as a leader and particularly as a team member, an aspect of myself I had never considered prior to entering the course. The unique experience of being a student and a co-op student in Lifelines allowed me to develop and test those skills as well as gain perspective as an observer. Lifelines' many new and unique experiences blend with humanity and structure to challenge students and bring down barriers. It is only through pushing ourselves that we find out what we're truly made of. I LOVED this class and would return to it in a heartbeat!*

Sophia

## **JOURNEYS into RELATION**

*Lifelines helped me in so many ways and it completely changed my life. The experiences you get and the skills you gain better prepare you for your future. My brother had taken Lifelines and from hearing his awesome stories, I looked forward to being able to take the class my whole high school career. I went from going to school once a week, to missing only four days the entire semester in this class. Lifelines is hands-on and a very interactive environment, which suited my learning style. I was able to graduate on time thanks to this course, and the amazing teacher who helped motivate me along the way. I loved the class so much that I decided to return to school for a 5th year, to co-op as a Teacher's Assistant for the Lifelines class. This course tests your strength mentally, physically and emotionally. It pushed me to open up my mind more, and grow as an individual; it also taught me leadership and determination, among other qualities. Lifelines sets you up with a great resume that gives you a better chance for future employment. I actually have the job I do now because of the credentials I have listed on my resume. I have been a student, a Teacher's Assistant, and a volunteer chaperone for this class and I highly recommend this course to every student. Lifelines is truly something that you'll think and talk about for the rest of your life.*

*Michelle*



### **A Parent's Perspective**

*I love the idea of Lifelines as a class. Putting teens into an environment that involves working as a team, being outdoors and active is great. .... Since joining Lifelines, Kelli has become more confident in herself and her abilities. She has learned new skills and pushed herself beyond what even she expected. She is now willing and able to try new experiences without the fear of failing, knowing she can succeed and that it is okay if she doesn't. .... Kelli is aware now that, by working together, things get done faster and more efficiently. She has become more interactive at home by helping out more and she understands that her actions have an effect on others. ....*

*In conclusion, I feel that Lifelines has had a great and positive effect on Kelli. I see a much more confident and happy teenager. She has many good friends. I am always getting compliments from other adults about her maturity, easy going attitude and her humour. I have always been proud of Kelli but, in the past year, I have seen her grow in many positive ways and it makes me proud to be her mother.*



## **Ecobound**

*Bayside Secondary School, Belleville, Hastings and Prince Edward District School Board*

**By Corrina Wilson**

Course Website:	<a href="http://blogs.hpedsb.on.ca/bss/cmwilson/about/">http://blogs.hpedsb.on.ca/bss/cmwilson/about/</a>
Target Size of Group:	20 students
Nature of Students:	Mainly college-bound students
First Year Offered:	1999
Time of Year Offered:	Spring semester
Time of Day Offered:	Daily, full day
Frequency:	Annually, dependent upon number of applicants
School Population:	740
Additional Course Fee:	\$450 (has not changed for 10 years)

### **Credits Offered:**

- PAD 30: Physical Education: Outdoor Activities
- GWL 30: Guidance: Designing Your Future
- SVN 3M: Environmental Science
- CGR 4C: Geography: Environment and Resource Management

### **Major Outdoor Experiences:**

- Canoe trip to Kawartha Highlands Provincial Park
- Paddler Co-op: ORCKA Moving Water Certification
- Frontenac Provincial Park: hiking
- Camp Kandalore: leadership training and facilitation
- Ontario Parks: park management, maintenance and interpretation
- Prince Edward Point Bird Observatory: bird migration
- Recreation and Tourism: canoe tripping, rock climbing, hiking, winter camping, orienteering and trip planning
- Bayside Quarry: wetland creation and preservation
- Forest management, timber marking

### **Leadership Opportunities:**

- School environmental Initiatives
- Tree planting and park maintenance at Presqu'île Provincial Park
- School Board Project Enhancement Grants

### **Major Challenges:**

- Declining school population
- Getting students through mandatory credits within 4 years
- Paper work, trip approvals, etc.
- Funding, especially transportation

**SHSM Environment Certifications Earned:**

- Red Cross Standard First Aid
- ORCKA Basic Canoeing
- ORCKA Moving Water 1A
- ORCKA Canoe Tripping Level 1
- Service Excellence (Customer Service Training, Ontario Tourism Education Corp.)
- Restricted Radio Operators Aeronautical (Industry Canada)
- S-102 Forest Fire Fighting
- WHMIS
- Chainsaw Safety (Safety Guys: meets Industry Canada Standards)
- Traffic Control Person (Safety Guys: meets Industry Canada Standards)
- Landscapers Tools (Safety Guys: meets Industry Canada Standards)

**Linking Program & Place**



**School and Ecobound History**

Bayside Secondary School sits midway between Belleville and Trenton on the picturesque Bay of Quinte. In 1789, a 298-acre parcel of land was set aside as a school land grant. It borders the Bay of Quinte and runs back through a 150-acre woodlot ending at a

set of CN rail tracks running east-west. The property was originally used for farming and a blacksmith shop. The first school was built on a portion of the property around 1836 while the remainder was again leased for farming. The north end of the property was quarried for limestone during the late 1950s. Both of these activities still impact the current look of the

property and affect the species diversity and distribution in the woodlot. The Bayside School Campus now includes Bayside Public School and Bayside Secondary School, which was built in the 1970s. The school was built in the village of Bayside as it was expected to eventually grow in population. However, Bayside stayed tiny and the school currently draws the majority of its students from north of Belleville and Trenton, from the villages of Frankford and Stirling.

The school itself is built into a hill on the north side of Highway 2, somewhat like a bunker. Only as you travel up the driveway does the building really come into view. This was my first impression almost 14 years ago as I came for my first and to-date only interview for a position at Bayside Secondary School. At this time, my program, Ecobound, was already up and running. Our school board had elected to use ministry “Natural Bridges” funding to implement a four-credit outdoor experiential program at every high school in the board. There was a real focus on having teachers become the instructors for the variety of certifications and training that the students would receive in the courses.

I inherited the program in 2005 after the original teachers left for other teaching opportunities. I have always had a passion for the outdoors and had completed my B. Ed. in the Queen’s University Outdoor and Experiential Education Program, but getting this opportunity was really just a matter of being in the right place at the right time. I quickly discovered that teaching this program was a monumental task, especially getting used to teaching all four credits by myself. It took three years to mould the program to my strengths and to get on top of all the trip forms, paperwork, community contacts, etc. Each program of this sort is unique not only because of the specific teachers in charge, but also because of the individual communities, local resources and geography in which the

programs are run. More recently, a supportive administration has brought in another teacher to assume one of the four credits, allowing me much-needed time for prep and for a work-life balance.

### **Uniqueness of Ecobound**

My program currently runs during the spring semester. This timing provides the unique experience of engaging in winter, spring and summer activities. The students gain an enhanced level of connectivity with the natural environment as the seasons and resulting activities change.

The Ecobound Program at Bayside benefits greatly from its particular geographical setting. Our campus has a large wooded area, open fields, hiking/skiing/biking trails and a large pond in place of the former quarry pit. One challenge for 21<sup>st</sup> century learners who are so reliant on technology is that it becomes difficult to make the environment and our natural resources accessible and relevant to them. With our site, the outdoors becomes an extension of my classroom every day. We can link the theory of the issues of resource management, water, soils, air, forestry and agriculture to practical activities immediately, without the need for expensive, single-visit site trips. For example, when we are studying forestry management, I can take the students to our woodlot where they can use tree calipers and prisms to do a plot survey. When we are discussing water conservation, we are able to quickly walk to the marsh on the Bay, test water quality and observe species diversity. Global environmental issues, instead of seeming distant and unrelated to the students’ personal lives, gain an immediate and local ‘in-my-backyard’ feel.

In a wider context, the Quinte region has a variety of fantastic experiential opportunities that we can take advantage of. We have fostered partnerships with many local outdoor sites. At Presqu’ile Provincial Park, students



are involved with spring tree planting and site maintenance. We visit Prince Edward Point Bird Observatory during songbird migration to help with bird banding, and also have a wonderful resource in the Glenora Ministry of Natural Resources Fishery Station. Local experts in agriculture, forestry, emergency services and search and rescue have also made guest speaking visits. Creating community connections enhances the experience for the students and shows them possible future career paths and employment opportunities.

The cost of transportation has proven to be a significant challenge to the Ecobound Program. As the years go by, I have therefore done more and more of our training and outdoor activities on site. In winter, we are able to cross-country ski and snowshoe on our network of trails. We look for animal tracks and deer bedding areas, build quinzees and skate on the quarry pond. As the weather warms up, we can mountain bike and play wide games (manhunt being a class and school favourite). Our outdoor camping skills such as fire starting and shelter building are also first practiced on site before any out-trips. As we approach summer, our canoe courses are run in the quarry in a safe, sheltered site and, when ready, we can branch out to the Bay to experience larger water. Learning and experiencing all of these outdoor skills in our own backyard provides my students with a distinct sense of place and closeness to the natural environment.

The annual survival shelter-building week has become a highly anticipated Ecobound tradition. The students are in small groups and need to use available (dead) material to make a survival shelter to keep out rain and snow. It always amazes me how much effort and pride they put into their shelters and the teamwork and co-operation that they exhibit.

The all day, four-credit program format also allows much greater development of student relationships. Having the students all day allows you to connect with each one of them on

a much more personal and real level. You begin to understand their struggles and needs and you have the time to devote to helping them problem solve. Many of the students that come into the course, although they might not realize it when they sign up, need a change or a break from the regular school day and its bells and routines. In this course, they get a little more freedom and flexibility during the day; this helps some of the students who are not as successful academically and socially in a regular school setting.

My most recent class was so incredibly supportive of each other, especially on our last canoe trip where you hope all our team-building for the semester will pay off. As always, we had a wide variety of physical abilities on the trip and it was nice to step back to have the students assume leadership roles. It was personally fulfilling to see them cheering on a classmate as he solo portaged for the first time. And, then, there was my all-female boat crew who trucked through the longest portage and stuck with each other to the end. The relationships that students form in this course and the memories of those connections are why I continue to run the program. You hope in some way that they can carry these skills into their future.

### **Female Lead Teacher**

Having a female lead teacher also shapes the nature of the program. I used to try to make the program really “hard-core” in terms of outdoor skill development by having long difficult canoe trips in distant areas such as Temagami. As I matured as a teacher, I realized that to make the program credible and appropriate for my students, I needed to develop attainable, realistic outings that bridged the gap between extreme tripping and their lack of experience. It became less about putting “notches” on my belt as to where I had led trips and more about offering the students an age and skill level appropriate experience. A wilderness canoe

trip to Kawartha Highlands Provincial Park is just as extreme as anything further north. The benefits of less travel time, lower bussing costs and exposure to local wilderness locations far outweigh my ego as I regale my outdoorsy friends with trip stories.

Reaching the staggering height of 5 foot 2 inches, my physical abilities always surprise the students when we are doing our hard skills training. One of my goals is to show the girls in the class that, although you might be small, you can still be strong and skilled. I show the boys in the class that women can also have outdoor expertise. My greatest triumphs have blossomed from my one-on-one conversations with individual students about their lives and struggles. Students have let me into their personal space and shared their hopes, dreams and problems. I cherish the opportunity to play the role of confidant for these young people. In some instances, I have been the only adult person in their lives who will listen, without judgement. The unique all day, every day arrangement of the Ecobound Program is the pivotal component in allowing these relationships and bonds to form.

### **Moving Forward in the 21<sup>st</sup> Century**

There are some inherent challenges with running four-credit outdoor experiential programs, especially as the needs of our 21<sup>st</sup> century learners change. They include securing stable funding, promoting the relevance of

outdoor education in a modern world, and accommodating the pressure on students to acquire prerequisite courses for post-secondary options. In order to meet those challenges, it is immensely important to develop a program that is applicable to students, their future goals and required skills. In order to appeal to students and to build these 21<sup>st</sup> century technology skills, I design tasks that use technology to further their understanding of the natural world. The students create blogs about their class experiences instead of traditional journaling; they use different apps on their smart phones while on trip such as guidebooks, star maps, and GPS functions. We can also use technology to connect with other classrooms and groups in the world by doing things like collaborative online projects and citizen science. Instead of banning technology, I recognize it as an entry point to the outdoors for some students.

Moving forward, I will continue to place an emphasis on local, regional, and global outdoor experiential environmental education. I will continue to create those ever-important community connections. I will further strive to nurture caring, honest relationships with my students. The best part of my job is seeing their growth in skill and confidence. By providing outdoor, relevant and real experiences, I am fostering a unique environment in which the students are encouraged to risk, to be challenged, and to succeed.

*Corrina has been an outdoor adventure enthusiast since she was signed up for Brownies at age 6. From that starting point, she progressed through the ranks of Girl Guides, worked as a leader at a Guide camp and completed degrees in Physical Education and Outdoor Experiential Education at Queen's University. Her passions lie in canoe tripping, paddling technique and cooking gourmet meals over a campfire. Her daughters have now become a part of this summer tradition.*



## **Environmental Studies Program (ESP)**

*Grey Highlands SS, Flesherton, Bluewater District School Board*

**By John Burton**

Target Size of Group:	20 to 28
Nature of Students:	College and university-bound students; some workplace students
First Year Offered:	1993. Has run every year since.
Time of Year Offered:	Normally offered in the second semester (Feb to June)
Time of Day Offered:	Daily, full day
Frequency:	Annually; it has run both semesters five times
Additional Course Fee:	\$500 per student
Other Schools:	Sometimes students transfer high schools to enrol in the program: Georgian Bay SS (Meaford) and John Diefenbaker SS (Hanover)

### **Credits Offered:**

- CGF 3M: Physical Geography, Patterns and Processes
- CGR 4M/O: Geography: Environment and Resource Management
- IDP 4U/O: Interdisciplinary Studies
- PAD 4O: Physical Education: Outdoor Activities

### **Major Outdoor Experiences:**

- 4-day backpacking trip on Bruce Trail
- 4-day canoe trip in Massasauga Provincial Park
- 15-day canoe trip in Temagami

### **Leadership Opportunities:**

- Teaching outdoor & environmental programs to local JK-Gr. 8 students
- Leadership roles on canoe trips

### **Other Key Elements:**

- Second year leadership program for students who have completed ESP program; complete a three-month environmental placement and participate in larger trips in the spring assisting in trip planning and organizing with leadership opportunities on these trips.

### **Major Challenges:**

- Declining school population
- Getting students through mandatory credits within four years; not as many “Victory Lap” students returning for a fifth year (these students normally made up the majority of ESP participants, but not as many are returning now).
- Funding is now a major problem as the \$500 course fee does not cover all the costs incurred over the semester; not permitted to increase fee so some trips like a 3-day winter camping trip have been cut; may have to start fundraising projects this spring to cover budget overruns; previously provided a water bottle to each student but this is no longer possible.

### **Integration of Specialist High Skills Majors:**

- Was enrolled in the Environment SHSM for five years, but not enough students completing all of the required elements so it was dropped



**Certifications Earned:**

- St. John's Standard First Aid; CPR Level B; AED
- ORCA Canoe Tripping Level 1 or 2

## **A Progression of Overnight Trips**

The Environmental Studies Program, or ESP as it is more commonly known, is modelled like many other four-credit integrated high school programs in Ontario. The same students remain together each and every day so that they can focus on cross-curricular learning that, in the case of ESP, embraces ecology, geology, outdoor pursuits, leadership and many of the environmental issues facing our planet. Classroom learning is immeasurably broadened and deepened through multiple field trips that enable real and hands-on learning. The fact that second semester embraces both winter and spring enables the students to experience snowshoeing, cross-country skiing, hiking, overnight backpacking, sea kayaking, canoeing, and canoe tripping.

Like other four-credit environmental programs, ESP also has a three-week teaching component where the senior students lead K-8 students in outdoor experiential activities for a full day. This is done in a wilderness area

adjoining the school that has ponds, open meadows, natural forests, and tree plantations. This experience is a real highlight for the senior students who must develop multiple lesson plans and provide leadership for the elementary students. One of the benefits of this type of program where high school students spend an entire day with the elementary students is that quite often, the ESP students act as role models in a big brother / big sister type of relationship while providing many environmental experiences.

The most unique aspect of the ESP program is its well-designed progression of four overnight trips in the spring. The skills learned on the early trips are put to the test during the final 15-day wilderness canoe trip in the Temagami area. The accumulated knowledge, skills and experiences all come together in this final “culminating activity.”



**Overnight Field Day Trip No. 1:** *Two days backpacking in the Kolapore Uplands*

The first overnight field trip the students participate in is a two-day backpacking trip through the Kolapore Uplands. This is a large forested area southwest of Collingwood that has an extensive network of hiking trails. Students hike on the trails visiting a variety of features including Metcalfe Rock, a cliff face on the Niagara Escarpment that includes a wide variety of tree and other plant species, microclimates, and caves demonstrating various amounts of chemical weathering. Here, students get to see first hand many of the topics discussed back in the classroom. That evening, students focus on stars and constellations. Weather permitting, they then sleep out under this spectacular canopy.

The following morning, students conduct a clean-up of an area that has seen much illegal dumping of residential garbage in the past. They pick up as much of this material as possible and leave it at the road or bring it back to the school for disposal. Continuing on their hike, the students visit a tornado touch-down site from at least 20 years ago and examine the impact of destructive weather events as well as how nature recovers. By the time they get back on the bus, the students are quite tired but not only have they been challenged physically, they have also made a number of connections between the classroom and real-world situations.

**Overnight Field Day Trip No. 2:** *Four days backpacking in Bruce Peninsula National Park*

The students in the ESP class participate in two different four-day trips. Both of these trips allow the students to build on their skills and outdoor knowledge in preparation for the final 15-day canoe trip in Temagami.

The first four-day trip involves traveling to Bruce Peninsula National Park just before the May long weekend. In groups of six, students

set up camp at the Cyprus Lake campground. Here the students learn new camping skills or refine old ones, e.g., setting up tents, tarps, cooking over stoves and campfires, campsite clean-up routines including how not to attract animals into your campsite. One of the first things they do when reaching the beautiful shoreline of Georgian Bay is to feel how cold the water is at this time of the year. They participate in a class activity that involves lying on the rocks and submerging their hands and forearms in the water for about two minutes. We call it the “hypothermia test”. The activity is timed and they then have to untie and re-tie their shoelaces. This activity allows them to develop a healthy respect for cold water and what it can do, the need to stay close to shore and the importance of wearing a PFD and proper clothing.

The class then hikes along the Bruce Trail and visits Indian Head Cove and finally the Grotto. This is where they really enjoy themselves and, despite having just participated in the “hypothermia test”, the majority of students opt to jump in the near-freezing pool of water in the sea cave.

Students also spend a day of canoeing on Cyprus Lake. Each student participates in an ORCKA Canoeing Level One introductory course. They also get to practice a “canoe dump” where they tip their canoe into the water of Cyprus Lake and do a canoe-over-canoe rescue.

The students also hike a 20 km stretch of the Bruce Trail along the Niagara Escarpment from Cyprus Lake to Tobermory. It is a challenging hike for most students and one that takes all day to complete. Stopping for lunch near Driftwood Cove, the students practice using water filters to fill their water bottles before heading off to Tobermory. Most students remark that they really love this trip and that, without it, they would not be prepared for the other trips that now involve canoes.



**Overnight Field Day Trip No. 3:** *Four days canoe tripping in Massasauga Provincial Park*

The second four-day field trip involves canoe tripping in Massasauga Provincial Park, just south of Parry Sound. This is an excellent park for beginner canoeists and it really allows the students the opportunity to use the knowledge they have learned over the semester, most recently at Cyprus Lake, and apply it to the context of a canoe trip. The main goal of this trip is to really learn the skills they need for wilderness canoe tripping. Additional skills include navigation, trip leadership, risk management, paddling strokes, sterning a canoe, campsite selection, bear-proofing a campsite, loading and unloading canoes and, of course, portaging.

Massasauga is a perfect place to practice all of these skills. The route selected is designed to challenge the students personally and to work together in their groups. Normally there are four groups of six students with two leaders per group. The groups are then paired up and they paddle their way along a set route, one pair going clockwise and the other counter clockwise. This reduces the number of canoes at any one time on portages but provides an added safety net of having more leaders available if the need arises. Upon reaching the campsites that are reserved each night, the groups separate and camp at their own sites as

the park enforces a maximum number of nine canoeists per campsite. Each group is self-contained with its own food and camping gear. Walkie-talkies are used to communicate between groups to coordinate other activities planned during the afternoon once camps are set up. During this time, further canoe instruction is provided in the many calm bays, avoiding afternoon winds. Often students have the opportunity to learn how to solo canoe and practice their canoe rescue skills in a controlled environment.

By the end of this trip, the students have gained additional confidence through adding wilderness canoeing and camping skills to what they have learned previously. They are now ready for their final canoe trip a week later, 15 days in Temagami.

**Overnight Field Trip No. 4:** *15 days canoe tripping in Temagami*

The final canoe trip takes place in Temagami. This is an amazing place to take students to experience canoe tripping. There are so many options for canoe routes; you can have a trip with very few portages or one that has many. This trip is the big one, the one that the students really look forward to. For many, it is the reason they enrolled in this course in the first place; for others, it is an experience like no other. An adventure in the true sense of the



word. A large number of the students have never been away from home and this can be both a good and a bad thing. Some welcome the chance to get away from home; others get homesick. Being in small groups of six students, the sense of family takes on a new meaning for most. They soon learn the meaning of friendship and teamwork and each of them learn to push their limits in ways they never dreamed of before.

It is quite a challenge to get ready for a trip of this length. Coming off two back-to-back four-day trips in the preceding weeks is a challenge on its own. Gear has to be cleaned and dried; food needs to be organized following a master menu in days from 1 to 15 and by group. They learn the process and value in investing time in the preparation of a trip where things are checked and checked again so that nothing is overlooked. Each group takes responsibility for packing its own food and equipment. Finally, once all items have been crossed off the master spreadsheet, everything is packed away in canoe packs and loaded on the trailers along with the canoes before leaving the school. Groups are colour coded with brightly coloured flagging tape to avoid confusing one group's packs with another. There is no question which pack belongs in which canoe as the canoes are also colour coded. There is nothing worse after a long day of paddling to discover that you have ended up with your shadow group's sleeping bags but have no tents whereas the other group has no sleeping bags but lots of extra tents. Luckily, if this does happen, the other group is located at a campsite close by.

Throughout the canoe trip, the students take turns with the different jobs needed to make a group run efficiently in a wilderness setting. A student might be the leader one day, helping with cooking the next, on clean-up or water filtering at another time. Each day, they switch their jobs according to a master schedule so that they all share the responsibilities of the group. At the same time, the two adult leaders

with each group allow the students to function in these roles independently but are there, ready to step in if needed.

The student leader of the day is provided with a leader map case and they are briefed the night before, reviewing the route the group will be traveling, the menu, as well what is required in their role as the student leader of the group. The overall group leader will only step in if necessary such as if the student leader has made an error in their navigation which could result in portaging into the wrong lake or heading off in the wrong direction.

As the students have been in their groups on previous trips, they are now operating with a high level of confidence in their outdoor skills. They essentially "hit the ground running" which allows them to immediately demonstrate the confidence they have learned from the previous trips. The length of this canoe trip provides a "real experience", one that is very different from the shorter four-day trips.

The canoe trips in Temagami are selected to challenge the students both physically and mentally. Each group always has one day of portaging that is more challenging than all the others. Often this involves the 2500 m portage in Temagami known as "The Barn". Although most students dread it, they soon learn the best way to complete this portage is by working together as a team, one of many life lessons learned on this trip. Afterwards, many of the students have commented that it wasn't so bad, or they even ask, "Can we do it again?" It has everything a portage can throw at you, from nice walking sections to muddy stretches, to rocky climbs, to boggy sections. I have had students so excited to do this portage that they have timed themselves and they find themselves carrying two or three canoe packs to reduce the number of times they would have to walk back to the start. One group upon reaching the Diamond Lake end of the portage in less than 90 minutes, were so excited that



they jumped into the bog at the end in celebration. They were so proud of themselves.

Canoe routes often involve climbing Maple Mountain; it takes about an hour and a half to reach the top. It is a great all-group activity done at the midpoint of the trip. It is a hard climb but well worth it for the views from the top. One group even decided to portage a 17-foot Swift Yukon Royalex canoe to the top, just to say they did. Another group carried most of their overnight camping gear and slept out on top of the mountain to see the morning sunrise.

The students in the ESP class have, over the years, visited some amazing places in Temagami. They have climbed Maple Mountain many times and one year they even made it to the top of Ishpatina Ridge, which is the highest point in Ontario. Last year, two of the groups made it to Florence Lake, deep in the heart of the Temagami wilderness. It took close to five days of hard portaging to reach this lake, but the students felt it was well worth the effort. The route back involved paddling along the Lady Evelyn River with its many scenic views and waterfalls.

### **The Last Night in Temagami:**

The last night of the canoe trip has all groups coming together at four nearby campsites on Lake Temagami. It is still about a two-hour paddle back to the boat launch near Loon Lodge at the Central Access Road but, for this night, the groups have one last occasion to celebrate their efforts and achievements. Some groups decide to stay at their own sites to share their final night together. Other groups want to get together and share their stories of the trip. It is an amazing feeling as I paddle to each group's campsite that final afternoon to visit everyone and to listen to their stories and proud accomplishments. Listening to them bursting with pride and excitement, I too relish their accomplishments. It is at this point of the trip that I truly gain a sense of how far they have come and the impact that not only

Temagami has had, but how much the entire semester has had on each and everyone one of these students.

For many, this will be a one-time opportunity, but for others, this is a life-altering experience that will stay with them for the rest of their lives. I have met many of my former students who have been through this program long ago and the one thing they always say is how the semester they spent in ESP was the best thing they did in high school and how they will never forget the two-week long canoe trip in Temagami.

On that final day when they wake up and realize that they are going home, they are excited yet sad at the same time as they know that this special time we have shared in this magical place called Temagami will soon be a memory. And, as we take the last canoe out of the water on our final day of the trip and load it on the trailer along with all the packs and paddles, the look of joy and sadness on each and every one of their faces is something I will long remember as they begin to realize how far they have grown over this semester and over this long canoe trip.

A final group shot with the camera is all that remains to be done before heading out on our six-hour bus journey home. The excitement grows as we get closer and closer to the school, finally arriving close to 7 p.m., 15 days after we departed. There are packs to unpack, the bus to clean up, and tents to set up in the gym to let everything dry out over the weekend. Students work in their groups with parents watching in amazement, barely recognizing their son or daughter with their messy hair, bug bites, deep tans, and campfire smelling clothes. They too feel the level of excitement in the air, and then, as if someone rings a bell, everything is set up to dry and they are off, back to their own world. Back to the world they left with a greater appreciation of hot water on demand, electricity, home-cooked meals, their families and friends, the Internet, text messaging, and

## *JOURNEYS into RELATION*

computer games. All of these things that they once took so much for granted, are now novelties and their true value only now makes sense.

When we all come back together for the final clean-up two days after the trip ends, many students ask if they can go back as they miss it so much: the campfires, the paddling on the lakes, the loons, the moose, the fresh air, the challenging portages, the mud, even the bugs,

but they really miss their groups and the times they had together. Sharing their time together in the tents, looking up at the stars at night, telling jokes, and recounting the events of each day. These are the special times that you remember long after high school is finished. These are moments that, taken together over an entire semester, make ESP one of the true highlights for so many students at Grey Highlands Secondary School.

*John has been teaching for 24 years at Grey Highlands. He enjoys many outdoor pursuits including cross-country skiing, hiking, mountain and road cycling, canoe tripping in Temagami, Killarney, and Quetico, as well as sea kayaking on Georgian Bay and Lake Superior. His most recent trip was a 12-day kayak trip along the remote Pukaskwa shoreline on Lake Superior and he has almost completed a circumnavigation of Georgian Bay with hopes to complete the final southern shoreline this summer. He is currently teaching his 26th class of ESP students.*





*JOURNEYS into RELATION*



## **Edwards Outdoor Centre**

*North Addington Education Centre, Cloyne*

*Limestone District School Board*

**By Sarah Sproule**

Target Size of Group:	Whole School (JK – Grade 12)
Nature of Students:	Whole School but especially geared toward at-risk students
First Year Offered:	The program began a number of years ago as a Leadership in Eco Tourism course; since my involvement (2009) we have been raising money and putting the program into place.
Time of Year Offered:	Year round
Frequency:	<p>The frequency of the activities is as follows:</p> <p>Annually: one canoe and one camping trip</p> <p>Each grade has the opportunity to use the outdoor equipment at least once (this year almost all students in JK – Grade 12 were out snowshoeing at least once). We hope that as teacher and student comfort level continues to develop, the equipment will be used on a weekly basis.</p> <p>Weekly: archery is held once a week either in the gym or on the outdoor range.</p>

**Additionally Course Fee:**

- None: we raise the money.

**Credits Offered:**

- Not applicable

**Major Outdoor Experiences:**

- Usually a 3 to 4-day canoe trip offered once or twice annually for senior students
- A 2-day camping trip offered at Bon Echo Park for Grade 9 or 10 students
- Snowshoeing and hiking offered on premises

**Leadership Opportunities:**

- Mentoring younger students (e.g., Grades 9 – 12 students worked with Grades 1 – 4 students helping them do a wiener roast and snowshoeing from the Edwards Outdoor Centre back to the pond on our property).
- Developing leadership skills to help run canoe trips: senior students are given more leadership roles on the trips. They do their own cooking, packing, portaging, etc. Teachers are there to guide and support, but students have enough skills to safely manage their cooking and gear.



**Other Key Elements:**

- Community Partners provide sponsorship for the program or donate new gear. All money has been raised through community partnerships (although the school has provided \$1000 and the school board pays for all of our certifications so that we can run the trips on our own).
- Community Partners are as follows:
  - Township of Addington Highlands, North Frontenac Township,
  - COFA (Conservationists of Frontenac Addington)
  - OFAH (Ontario Federation of Anglers and Hunters)
  - North Bay Fur Harvesters
  - Frontenac-Addington Trapper's Council
  - Tobia's Guardian Pharmacy
  - Bishop Lake Outdoor Centre
  - Cloyne Home Hardware
  - Boomhour Danger Tree Removal
  - Smart's Marina
  - Hydro One
  - Denbigh-Griffith Lions' Club
  - Limestone District School Board
  - North Addington Education Centre
  - Flinton Recreation Club
  - Napanee District Community Foundation
  - Individual donors

**Major Challenges:**

- Raising money is challenging. It takes hours to write letters, attend meetings, etc., and we do not always get the support or bursaries that we are hoping for.
- It is also a challenge to keep up our certifications to run the trips as many of them need to be re-certified every two years.

## **All Hands on Deck: OEE in a JK to 12 School**



North Addington Education Centre is a very special and unique school; we are one of very few public schools in the province that are Junior Kindergarten – Grade 12 all in one school. With fewer than 400 students in total, the school community is very intimate, strong and family-oriented. The school is located in Cloyne, a small, rural village and it is a very important 'hub' for the community at large. Community involvement and support in the school is extremely evident and is reflected through the outdoor program. Not only is the school structure unique, but the location of our school makes it very special; NAEC is located on 87 acres of land that the school owns; this land is comprised of rolling hills, a large, active

pond, trails, and a solar-powered outdoor centre. Our school truly is sitting on a 'gold-mine' of outdoor opportunities for all of our students; it is with this knowledge that the concept of outdoor education was born at NAEC. As a graduate of NAEC in 2003, I knew the importance the outdoors had on my life both at school and at home. During my Grade 11 year at NAEC, I was involved in the Leadership in Eco-tourism program for a semester; it was during this time that I realized the importance of combining my love of the outdoors with education. Growing up in a family where outdoors was a regular part of my life (be it through hunting, fishing, trapping, camping, etc.), the Leadership in Eco-tourism program was a natural fit; however, I knew that I did not want my experience, or the experience of future students, to end there. I went on to pursue degrees in Biology, Physical Education and Teacher Education at Queen's University with a dream to one day return to NAEC.

Since North Addington is a very small school, I knew that it would not be possible to have the Integrated Curriculum Program at our school as we already run a Specialist High Skills Major course in construction. However, what I did know is that the outdoors could be put into any curriculum, grade and subject. The concept of outdoor programming was reborn at NAEC in 2010. Our goal was to get students outside as much as possible and begin to make use of the 87 acres of idle land and the solar-powered outdoor building that our construction class had completed. Many of our students come from families who are greatly involved in the outdoors; having this at school would add to their sense of place and belonging. It would give them something to feel was 'theirs'.

Initially, we started with running small canoe and camping trips by borrowing gear from a near-by outdoor centre. However, we realized that what we really wanted was to have our own gear that we could use on our own

schedules; this also involved getting certified to run the outdoor trips independently. And so began the process of fundraising and certifications; we went to (and continue to go to) community meetings and we have raised thousands of dollars through our local townships, Lion's Clubs, Trapper's Council, Conservationists of Frontenac Addington (COFA) and other groups. Our commitment has been to keep all of our purchases within our local community so that we can give back to them. This has been a very beneficial program for the community at large as it has given our local businesses advertisement and sales since we keep our purchases local. We have also applied for bursaries and continue to look for avenues to support our program. In addition, we have acquired all of the necessary certifications to take students on canoe and camping trips without hiring outside people. We knew that if we had all of the gear at our school for our students and if we could run the trips on our own, not only would it reduce the cost of the trips, but it would allow us to run more trips with more students ... and more students would be outside learning!

In addition to running canoeing and camping trips with our Grades 9–12 students, we wanted to develop the land that the school owns in order to make use of the walking experiences on our property. Through these efforts, we have created an outdoor archery range and a half-kilometre trail that leads back to the pond on our property. This is frequently used by many of our students. We use our own solar-powered outdoor centre (named the Edwards Outdoor Centre) to store equipment that is being used. This has allowed our students and staff to start to make use of the post-and-beam structure building which was constructed by Technology classes at our school in the mid 2000s.

Through donations received and money raised to date, we have developed an inventory of the following: life jackets, boat safety kits,

wilderness first aid kit, paddles, cook stoves, pots, pans and cooking items, pond study equipment, 10 pair of adult snowshoes, 17 pair of child snowshoes and 5 pair of junior snow shoes, 10 bows, 5 targets, 1 arrow curtain, 60 arrows, 5 target stands, archery arm guards and a bow rack. Our goal for the upcoming years is to raise enough money to purchase our own canoes, canoe trailer, packs, food barrels and tents. Recently we received a \$4000 grant from Napanee District Community Foundation in order to purchase our very first canoes. In addition to this purchase, our school has agreed to fund the building of a new canoe trailer. This semester, our Grade 11/12 manufacturing classes will be designing and building a trailer that can hold eight canoes for our trip in June.

Now that we are beginning to get our own gear, the response has been phenomenal. We have had some of our primary, junior and secondary grades out snowshoeing and exploring the outdoors. We have run canoe trips on a yearly basis and we continue to have students ask us to run the trips year after year. The life lessons that we have been able to teach in the outdoors have been phenomenal. As Jared Salmond, a Grade 12 student, indicated in his speech to our community partners at the opening of our Outdoor Centre,

*With the use of our brand new life jackets, and help from many other participants on the trip [referring to his trip June 2013], one student was able to overcome his fear of swimming in deep water, and was thoroughly enjoying himself while doing so. As a swim instructor, I know that this is more than just overcoming a fear; it is something that could one day help to save his life. This would have never happened if we had just simply been sitting in a classroom or playing a game in the gym. We have had students challenge themselves. They have become the leaders on these trips; they pack and cook their own food in food*

*groups, pack their own clothing, portage their gear and set up their campsites independently. They are able to do this because their experiences have been very consistent; our Grade 12 students this year will be embarking on their fourth canoe trip. They are so knowledgeable with respect to campsite set-up, etiquette, canoeing, packing, etc., that the trips essentially run themselves. It has developed confidence and learning that is second to none.*

Many of these trips have also involved students completing summative and culminating tasks for Physical Education and Biology courses. Thus, not only do the students gain experiential knowledge and life lessons, but they are able to complete academic work in the outdoors.

Furthermore, we have engaged our primary classes in a similar manner; during pond studies, students have set minnow traps and collected specimens to keep alive and study for a few days in their classrooms. In addition, having the outdoor equipment and opportunities has further bonded our elementary and secondary classes. Secondary students mentor and partake in some activities with the elementary students, be it through buckling up snowshoes, sharing a hike or shooting bows together ... the opportunities are endless. As we continue to grow our outdoor program, the connections between our elementary and secondary classes are growing as well. This fits very well into our 'one school' philosophy.

Our "at risk" students benefit greatly from these experiences; especially the archery program. Archery has given many of these students a reason to come to school and something they can feel very successful at. We have seen an improvement in behaviour, attendance and demeanour in some of the students who take part in this program. Currently, archery is being run as an extra-curricular activity but we see it easily fitting



into the physical education curriculum in the future. Amey Savageau, a Grade 12 student who regularly participates in the archery program, had this to say about the program:

*Now the program has grown to a regular group, with newcomers almost every week. When I know in advance what days I get to shoot, I make sure that I will be there that day so I can practice my skills. Thanks to archery, I've become friends with people that I normally may have not been friends with, and I have something to look forward to every week!*

The success of our program is becoming very evident both in our school and in our community. Students are now coming to community meetings with us to share how the outdoor experiences have been life changing for them. The community has continued to respond with financial support for our program. Although our program is still young in its development, it is increasingly becoming an integral part of the school, classrooms and routine. Teachers are getting 'on board' and using the gear in their classes. Students are

becoming familiar with the gear and how it can be used.

This winter, our Grades 1–4 classes went snowshoeing in the bush, discovering animal tracks and looking at the evidence of how animals survive during the winter months. Some of our high school students supported this hike and the learning. The trip also included a hot dog roast and hot chocolate at the Edwards Outdoor Centre. And yes, this took place, literally, in our backyard.

It is with this in mind that I am reminded of how special and unique our school really is. The outdoor focus has truly given our teachers, students and the community at large something to call their own; it has continued to develop a strong sense of place in both our staff and students. Being a small school, our students often do not have the extra-curricular opportunities of larger, city schools; now they have many different opportunities that require no extra money or travel. I can't think of a better way to spend my career as a teacher than to foster a love of learning and love of the outdoors as well as the ability to experience it first hand for generations to come.

*When not teaching at North Addington, Sarah and her husband take their two children (ages 2 and 4) out hunting, fishing, trapping, tapping trees, swimming, hiking, working in the bush, camping and cottaging as much as possible. One of Sarah's favourite pastimes is bow hunting; she recently harvested a black bear with her compound bow.*



## **Wilderness Trail Blazers (WTB)**

*Dunnville Secondary School, Dunnville, Grand Erie District School Board*

**By Mark McCormack**

Target Size of Group:	20
Nature of Students:	Combination of university and college-level students
First Year Offered:	2003
Time of Year Offered:	Second semester
Time of Day Offered:	Daily, two periods per day
Frequency:	Initially offered every other year Since 2010, offered every year
School Population:	500
Additional Course Fee:	\$300.00
Major Challenges:	Declining school population

### **Credits Offered:**

- CGR 4M: Environment and Resource Management
- PAD 4O: Physical Education: Outdoor Activities

### **Major Outdoor Experiences: Three trips, each three days in length**

- Winter camping at Blue Springs Scout Camp
- Hiking on the Bruce Trail near Milton (early May)
- Canoeing on the Grand River between Cambridge and Cayuga (mid-June)

### **Other Experiential Opportunities:**

- Bird banding at Ruthven Park and Bird Studies Canada
- Environmental teaching to elementary students
- Stream Invertebrate Study
- Lake Erie shoreline clean-up (James N. Allan Provincial Park)
- Secondary School Science Symposium at Royal Botanical Gardens (RBG)
- Green Living Show
- Indoor rock climbing at Gravity
- Mill Creek restoration project with Trout Unlimited
- Visit to fish culture station in Normandale (Ontario Ministry of Natural Resources)

## **A Two-Credit Integrated Program**

I started Wilderness Trail Blazers (WTB) because I was greatly influenced in my own education by two experiences. The first was in high school when I participated in and thoroughly enjoyed every aspect of the first outdoor environmental education course at my high school (Humberview School in Bolton, Ontario) with a great teacher, Steve Rutherford. The second was at Lakehead University in my

Outdoor Environmental Education course where I was greatly impacted by Tom Puk. Both of these outdoor enthusiasts have been extremely influential on my education path and my outlook on life itself. Once I was at Lakehead University for teachers college, I told myself that my ultimate goal was to develop my own outdoor education program. The WTB program was developed in conjunction with

my department head and an agreeable principal.

The Wilderness Trail Blazers program was started in 2003 as a four-credit Outdoor Environmental Education program at Dunnville Secondary School (DSS). It was too much for me to handle, so the course was modified to two credits. It has been offered at DSS in the following years (2003, 2005, 2007, 2009). Since 2009, the WTB course has been offered every year because there were 48 applicants for the 2009 course. The school population in 2009 was 530.

Wilderness Trail Blazers is an outdoor environmental education program that offers students the opportunity to learn by doing in the outdoors and in a classroom setting where they become part of the WTB family.

Some of the most memorable WTB moments are simple activities that have turned into amazing learning opportunities. My first recollection is a local activity where I take the students on a day hike along an abandoned railway. The activity begins with the students thinking we are just going for a walk in town. I take them to a 15-acre tall grass prairie and tell the students about the uniqueness of this area. We hike through the tall grass until we reach the railway where there are numerous bird feeders. I give the students a handful of sunflower seeds to feed chickadees. This activity is extremely rewarding for all students who participate; the chance to be so close to a wild bird and the smiles that this creates is the best feeling for an outdoor educator.

I conduct a number of exploratory hikes in our local area. Students are amazed by the number of Carolinian tree species, the other unique plant species, and the number of animals we can see just by hiking away from

town. On one occasion, I took the class to the end of the Grand River at Lake Erie in the early spring. My goal was to show the students the number of different bird and animal species at that time of year. As we were observing some Canadian geese and tundra swans, a pair of bald eagles flew past us no more than 50 metres away. The students and I were in awe of these huge and majestic birds. It was the highlight of the day, week and possibly semester for these students.

Another impressionable experience for me was to have three students paddle an extra 25 kilometres from Cayuga to Dunnville on the Grand River. It was their decision to do this and it was an extra four-hour journey. I think I was most impressed with their determination and heart, as they worked so hard to complete the trek. The students were extremely happy and exhausted by the end of the day and they are the only students in eight years that have decided to paddle all the way to Dunnville. It was an amazing accomplishment for them. I was and still am so proud of what they completed.

My final recollection involves winter camping in some horrible shelters. All the students were miserable. One student took it upon herself to look after the fire all night long, boil water for her classmates and even cook food for them. She took the reins as the leader in the group and the other students respected her great work ethic and positive attitude. I admired how all the other students followed and listened to her. As the semester progressed, she developed into an outstanding leader for Wilderness Trail Blazers.

When all is said and done, the skills, knowledge, confidence and friendships the WTB students develop over the semester are the most rewarding for me.



## ***JOURNEYS into RELATION***

*Mark's favourite activities with his wife and three young boys include biking on their country roads, hiking in the forest behind their house, and camping in the backyard. Mark also enjoys mountain biking, running, camping, kayaking and adventure racing.*





## **Community Environmental Leadership Program (CELP)**

*Paris District High School, Paris, Grand Erie District School Board*

**By Tara Topping**

Target Size of Group:	20-27
Nature of Students:	Includes workplace, college (mainly this direction) and university bound.
First Year Offered:	2011
Time of Year Offered:	Spring Semester (Feb-June)
Time of Day Offered:	Two period program every afternoon
Frequency:	Offered annually, but ultimately dependent upon number of applicants
School Population:	850
Additional Course Fee:	\$300

### **Credits Offered:**

- Used to be four-credit package; now reduced due to declining enrolment and to allow for increased participation of students from all three pathways.
- CRR 4M/4E      Environment Resource Management
- SVN 3M/3E      Environmental Science

### **Major Outdoor Experiences:**

- 4-day snowshoe trip on Tea Lake just outside Algonquin Provincial Park
- 3-4 day canoe trip in Algonquin Provincial Park
- 4-day conservation camp in Dryden, ON (Sponsored by Ontario Forestry Association, OMNR, and Domtar)

### **Leadership Opportunities:**

- Teach Gr. 4 students at the Children's Water Festival.
- In the past we have run environmental education training (1/2 to full day) for Gr. 2-3.
- Students run the full day transition program (STEP) for Gr. 8 students coming into Paris DHS.
- Students also involved with coordination and leadership roles during Earth Week with local elementary students.

### **Other Key Elements:**

- Students participated in a Managed Forest Tax Incentive Plan (MFTIP) with a local forester
- Job shadowing; job twinning.
- Local partnerships with Grand River Conservation Authority (GRCA)
- Most programming occurs at Apps Mill Nature Centre & throughout Brant County in the field

### **Major Challenges:**

- Declining school population
- Removal of the fifth year of high school. Students now have to pay to return for the second semester of their fifth year. This time pressure makes it more difficult to obtain all necessary credits for college and university application.

**SHSM Environment Certifications Earned:**

- GPS/Compass Orienteering
- Watershed Management
- Habitat Restoration
- ORCKA Open Water Basic Canoe Skills
- Tree Identification
- First Aid/CPR

## **Engaging Students Through Outdoor Experiential Learning**

Imagine a world where kids don't play outside. Where kids don't know what it feels like to climb a tree, get dirt on their hands, or hear a bird sing deep in a quiet forest. In this world, students spend time indoors, maybe at a desk or a computer or in front of a television. They might read about these things or see them but never really feel or experience them. This world is becoming less difficult to imagine and more of a reality for many of our students. It is becoming more expensive and difficult to hold onto opportunities that take our youth outside. This is a disaster. Research shows that connection with nature improves physical and physiological health. In fact, with the decline of interaction with nature, childhood obesity, asthma and attention deficit disorder have all risen (<http://www.neefusa.org/>).

From my own experience, I have seen eyes widen at the discovery of something new like a blue spotted salamander tucked under a rotting log, and felt the energy of otherwise disengaged students when given the chance to wade thigh deep in a creek to obtain bed samples. I remain convinced that experiential-based Environmental Education is a critical piece we need to provide in our education systems.

Four years ago, I had the remarkable opportunity to become the primary teacher for CELP (Community Environmental Leadership Program) at Paris District High School. This is an interdisciplinary course that combines four credits (recently changed to two credits) in one

full semester experience. Over the years, the combination of credits offered in the package have changed depending on the teacher behind the program but it always included outdoor Physical Education, an Environmental Science element, and Environment Resource Management. There has always been a focus to integrate students into co-op opportunities with various careers in the environmental field, having individuals job shadow or job twin for varying amounts of time. Students used to sign up for the entire package and work with the same group of students for the entire day for one semester. One thing that has been consistent over the 12 years is that the program is experiential and hands-on, with exceptional amounts of time spent in the outdoors. This structure has allowed students to discover a great deal about themselves, the environment, and their ability to interact with others. More than any other program that I have been involved in, students are engaged and interested in learning about the subject area, and this influences their attendance records and grades.

A great example of this is a student named Mark. In the fall semester, he was unsuccessful in each of his four credits, as well as frustrated with school and, in turn, teachers. In the second semester, Mark was a part of CELP and he was awarded the Most Valuable Team member for his exceptional contribution to the program, compassion for others and his role as a team player. Mark went on to receive a



position with the Ministry of Natural Resources in their summer ranger program where he again excelled. This is a student who was frustrating and was disregarded in the regular classroom but thrived in an experiential program. I'll never forget the excitement on his and a couple of other students' faces that were doing a work experience program at a fish hatchery. They were telling the other students about what they did and how they got splashed while trying to move the fish between tanks. They enthusiastically told about the program and how important it was to restocking some of the native species in the local environment. It is rare to generate this kind of excitement for tasks assigned but, in CELP, it is a pretty standard energy in the classroom. This contributes to very few absences in the class; students simply do not want to miss whatever might come about during a day in this program.

Three years ago, there was an opportunity to integrate this program into the provincially funded Specialist High Skills Major Program (SHSM). Extending beyond just the credit requirements, this allows students to gain industry-based certifications in areas such as watershed management, habitat restoration, and GPS/orientation. It also includes chances

to participate in Reach Ahead experiences that show students what opportunities might be available for them post-graduation. This is what one student had to say about the program:

*The opportunities I have had in SHSM have changed my life. I didn't really know what I wanted to do in school or when I graduated but I realized I loved working outdoors and wanted to find a career that would let me do that. Working with the Grand River Conservation Authority exposed me first to forestry work around here and then I got to go to Dryden with Mrs. Topping. Here we worked on Forest Management Plans and interacted with people from Natural Resources Canada and Forestry companies ... it was so awesome.*

*I now go to college at Sir Sanford Fleming in the Forestry Technician program, and I LOVE it. I am using lots of skills I learned in SHSM and I'm doing really well in school which I didn't used to. I totally recommend SHSM to anyone who likes the Environment, or isn't sure what they like (like me).*

*Evan*

The partnership with the SHSM program opened up partnerships with the Grand River



Conservation Authority (GRCA) to certify our students in industry standard skills. In the Habitat Restoration program, students learn about prescribed burning, invasive species removal, native plant restoration, and then are given the experience of taking on a restoration program of their own. Depending on what is available, this has included a stream bank restoration, pond habitat renewal, scotch pine removal, and roadside wind break planting. These transferable skills are so “fun” to get that students forget how much they are actually learning. Exposure to so many people and areas of the environment has contributed to a huge success in students moving on to take an environmental program at college or university. They are just so inspired to pursue a related career.

Despite the inclusion of other experiential opportunities in school such as Co-op and SAL,

these programs cannot replace CELP (or other similar programs) that is predominately outdoors. We have many students who will not only benefit from the nature, but also actually NEED the outdoors. In combatting the frustrations of ADHD, anxiety, difficulty in classroom engagement and feelings of not belonging, outdoor experiential education is incredible. Taking a student out of the classroom and allowing safe controlled space for thought, decision making, leadership and sometimes play has an amazing power to break down barriers in some of our students. Some forget to “be cool” and suddenly transform to kind, thoughtful members of society. The transformations I have seen in even a short time with this program are inspirational. When students connect to nature, we give them an ability to also connect with themselves and the people around them.

*When Tara was in high school, she longed to participate in the outdoor program offered there, but she was deterred by the thought that, as a university-bound student, she needed to focus on Math, Science and other academic style courses. During her university years, she discovered her deep love for hands-on outdoor learning through summer employment with National Parks and Historic Sites. Her passion for the environment continues as a teacher at Paris District High School.*

## **ECO-Shores**

*Peninsula Shores District School, Wiarton, Bluewater District School Board*  
**By Tobin Day**

Number of Students:	24
Nature of Students:	Split classes: essential (workplace), college, university
First Year Offered:	2008
Time of Year Offered:	Second semester
Time of Day Offered:	Period A, B and C (8:55 – 2:00)
Frequency:	Every other year
School Population:	600 K-12
Additional Course Fee:	\$450 (with a discount for SHSM students)

### **Credits Offered:**

- PAD 40: Physical Education: Outdoor Activities
- ENG Varies with needs of students; usually at Grade 11 or 12 level, essential, college & university
- CGR 4M: Geography: Environment & Resource Management

### **Major Outdoor Experiences:**

- 3-day supported winter camp
- 3-day hike in Bruce Peninsula National Park
- 8-day canoe trip in Algonquin Provincial Park

### **Leadership Opportunities:**

- Ducks Unlimited School Programs – Grade 4

### **Other Key Elements: Partnerships with the following:**

- Gosling Foundation,
- Peninsula Adventure Sport Association
- Bluewater Outdoor Education Centre
- Ducks Unlimited (funding)

### **Major Challenges:**

- Declining enrolment
- Funding, transportation

### **Specialist High Skills Majors:**

- Hospitality and Tourism (ecotourism focus)

### **Certifications Earned:**

- Wilderness First Aid
- GPS Green Check
- ORCKA Canoe Level 1 Basic Paddling

## The Value of Community Partnerships



I recently filled out a reference form for a student from my first ECO-Shores class (2009). Describing her leadership skills brought back a lot of memories for me. I pictured the happy images of students expressing joy or pride, and more difficult memories of tired and frustrated students struggling to meet course expectations.

Let me back up a little. Peninsula Shores District School is a K-12 school in the small town of Wiarton (best known for Groundhog Day). We have about 300 high school students and a three-credit outdoor education program. Leadership, Geography and English (added in 2014) are incorporated into a semester-long program. Students sometimes take a fourth credit, but most leave their last period as a spare. The highlights for participants are usually winter camping, hiking the Bruce Trail, and padding for eight days in Algonquin Park. We also run Grade 4 school programs at the Bluewater Outdoor Education Centre (BOEC) just seven minutes down the road.

Fortunately, I have been able to stay mostly at Peninsula Shores for the last five years despite declining enrolment and all the job changes that being low on the seniority list can bring to teachers new to a board. I am now running ECO-Shores for my fourth time and, each time, the program invariably gets better. Increased knowledge of the school, community and students as well as much more communication and planning for my strengths as a leader (e.g., more canoeing, less hiking) have all contributed to a successful program where some students return as co-op students and younger students often plan taking this program years in advance.

One of the great advantages of professional stability is community building and partnerships. Tod Wright, private donor and Past President of Ducks Unlimited, has been a staunch supporter of the program. Tod ensures we have funding to pay for transportation to the Ducks Unlimited school programs at the BOEC for both my class and the Grade 4s. The



following quote outlines Tod's participation in the program as well as his goals:

*Through the Ducks Unlimited Canada Project Webfoot program, I have been pleased to sponsor several Grade 4 classes for their day at the marsh at the Bluewater Outdoor Education Centre (BOEC). What has made the experience so memorable for the kids is the mentorship by the ECO-Shores students from Peninsula Shores District School led by Tobin Day. This is a win-win as the Grade 4s learn in a hands-on outdoor forum from senior students who are passionate about the outdoors. The BOEC provides the perfect setting to deliver this program. My goal has been to try and inculcate a love of the outdoors and specifically wetlands in our future leaders.*



Deb Diebel, BOEC site manager, corroborates and elaborates on Tod's description:

*Watching ECO-Shores students interact with the Grade 4 students during their Ducks Unlimited programs is where the real magic happens, and thoughts of fundraising fade away as the fun in learning takes centre stage. We watch the confidence in each ECO-Shores student grow as they share their knowledge with the younger students. The Grade 4 students are so enthusiastic about what they are learning, and so excited to have these older, positive students paying*

*attention to them; the ECO-Shores students benefit just as much from the instant, positive feedback they receive. One day with younger students sees them rising to leadership challenges, and getting excited about the reactions they are able to elicit from the younger students. They quickly learn to apply what has worked, and tweak what doesn't to make each subsequent lesson better. ECO-Shores students come out of the experience with increased confidence, leadership skills, and an awareness of what they are capable of in addition to their increased awareness of local wetlands.*

Our other major partnership is with the Gosling Foundation. In return for generous funding (enough to pay for a school bus to Algonquin and back), this ecologically-minded foundation requests a class project each year. Stan Kozak from the Foundation and I select a topic for my class to research and present to our community. The first year we set up a display at the Wiarton Farmers' Market about the Bruce Trail. The second year we taught visitors to the Wiarton, Owen Sound and Keady Farmers' Markets about endangered species with a special focus on our local threatened Eastern Massasauga Rattlesnake. This project forms the academic focal point of the program. This year's theme, flight, was selected to complement our new English component. The literary options for flight seem endless. The poetry of Mary Oliver and Barbara Kingsolver's newest novel about monarch butterflies (*Flight Behavior*) are just the start of my list of possible texts to use. Geography links are evident as well; the barriers faced by migratory insects, birds and bats coincide with much of the resource management curriculum.

Visiting Keady Farmers' Market to teach about endangered species was one of my favourite field trips last year. This busy market has over 250 vendors in the summer months. Students formed a partnership with Bruce Peninsula National Park, and one of their

naturalists was able to accompany us along with “Fluffy,” a captive rattlesnake unable to be released into the wild. Fluffy easily caught peoples’ attention and the park naturalist loved stepping aside and letting the students do the teaching. Both he and I found it rewarding to see youth developing their confidence, leadership and communication skills by talking to over 300 visitors. Students were interviewed live on the local radio, and Stan visited so students could report directly to our funder. Prior to our trip, students researched facts and myths about rattlesnakes, wrote press releases, worked in the shop to create a display and called market managers to book tables. The real nature of this assignment made it much more meaningful than writing and handing in an essay, and prepared students much more effectively for “real” life. One participant, giving advice to next year’s class, said,

*Make sure you take your time and do a good job. It may not seem as fun as all the trips but at the end it is so worth it. Presenting and seeing all the different people you will touch and change their opinions is wild! Make sure this is just as high a priority as the trips.*

Another student, who spent an optional Saturday morning at the Owen Sound Farmers’ Market suggested to not procrastinate; *be the one who gets things done (the sense of accomplishment feels amazing!)*

Running a commissioned grant project takes some courage and a lot of flexibility. Moving away from teacher-directed to student-directed projects is truly a leap of faith. The curriculum becomes something you make connections to, instead of a checklist where you tick items every day. You have to be willing to let students struggle with freedom and also be willing to let them fail. Students always eventually figured out what to do, and each year it gets easier and faster as the students see their older schoolmates complete these real and meaningful assignments.

Being in the same school also makes it easy for me to keep in touch with or hear about past participants. And this is where some of my biggest learning has happened. At least three of the original 14 participants have ended up exploring fields of work directly related to outdoor recreation/geography in part because of ECO-Shores. This includes one girl who complained endlessly ... I remember her best for figuring out, on day seven of our hike, that you can actually blow up a Therm-a-rest mattress. Others have come back to tell me how much they loved the program and wish they could take it again. One did. Even in its most tumultuous time, ECO-Shores has had a big and positive impact on these students’ lives. If this can happen in a year where the program is quickly changing hands (my first year), just imagine the impact a more thoroughly planned year has on students.

John, ECO-Shores alumni 2011 and co-op student 2013, concurs:

*I believe that ECO-Shores can definitely have a long term impact on the student lives because you’re put into outdoor situations where you discover new traits about yourself and find out your personal strengths and weaknesses. It is just really amazing how everyone in the group fits together like a puzzle and we all learn from one another and become a productive group. It really allows me to feel confident for the future of ECO-Shores. I find it teaches you many skills that can be used in everyone’s future not to mention the great memories you will acquire along the way.*

Justine was a participant in the same year, and hopes to come back as a chaperone in future years. She also sees benefits to the field trips, a subject I haven’t even touched on in this article.

*ECO- Shores impacts the lives of all who have the chance to take this wonderful program. It was without a doubt one of the best things*

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*that I've done in my life. It really builds leadership skills as well as fosters a love of nature and the outdoors. ECO-Shores has taught me to take breaks from our electronic society, to unplug and live in the moment. The class also teaches you to take on challenges as well as to try again when you don't succeed. Hiking with a heavy pack or portaging a canoe and gear over fallen trees may be a challenge, but nothing beats the peacefulness of being away from the hustle and bustle of everyday life. I always tell people to take ECO-Shores because you don't truly know happiness until you spend eight days canoeing in Algonquin!*

Writing this article has brought me a lot of happiness. Reading quotes from partners and past participants has been rewarding and renewing, perfect timing before beginning a new ECO-Shores semester. Developing and teaching this integrated program has become one of the highlights of my career.

So, if you're an integrated programs teacher bogged down by paperwork, unsupportive administrators or managing a challenging group of students, have faith that what you are doing is important. You can't always see it right away, but integrated programs deeply touch peoples' lives.

*Tobin enjoys both spending the morning in pyjamas, reading novels or getting up early and spending the entire day outside. She loves exploring natural places both close to home on the Bruce Peninsula and further afield. Summer never feels complete without a big trip.*





## **A Student Perspective on ECO-Shores**

**By Nic Kreutzwiser**

Who doesn't enjoy good friends, campfires, and the beauty of nature? I think it's safe to say even the least 'outdoorsy' people enjoy making s'mores around an open fire with good company. So, with this in mind, you can imagine my excitement when I started hearing about the ECO-Shores program at my high school.

During the course, I really enjoyed its relaxed atmosphere, the group I was a part of, and the fact that we got to go on so many trips. Everyone wanted to be there. This wasn't a Math or English that students needed to graduate, so everyone seemed really into most of their work. There were the everyday practical learnings that became a unique part of our shared knowledge: "don't eat vegemite with sour keys" is one such example; these foods should never cross paths ... ever. And, then, there were larger life lessons, ones that would be difficult to find in a book. We learned how to compromise on who gets the better campsites on day six of an eight-day trip, how to ask for help and how to offer help when someone is having a bit of trouble. We learned how to hike for three days in the pouring rain and still have fun. These are the types of ECO-Shores experiences that helped us grow so much as people and ones that will help us in every aspect of our future lives.

Looking back on my experience as an ECO-Shores student has me incredibly excited to be involved as a co-op student for this year's class. Before taking this program, I really wasn't sure what I wanted to do after I left high school and, if I'm being honest, I'm still not 100% sure what my future career will be. I do know with certainty that it will be in the environmental field. After running many school programs with Grade Fours – seeing the look on their faces

after catching their first dragonfly nymph, and their actually being interested in learning something new – I am determined to get more outdoor-related classes into schools. Though taking ECO-Shores is sure to be a great asset to my future in the outdoors, the program would also be a huge asset in any field. As a co-op student this year, I am able to help the class out by sharing my own experiences and making suggestions along the way. Being involved in an integrated program always leaves me with a smile as the students seem to excel and exude such a positive energy when they are able to work outside in the fresh air and sun.

This program, for me anyway, was a way to become interested in subjects that I previously wasn't exactly fond of. By applying English, Biology and Geography skills in a more hands-on and direct way, I was able to focus better on my class, and I actually enjoyed the projects and looked forward to working on and completing them as best I possibly could. One of the best examples of this was running the school program for Grade Fours at a local wetland. Everyone in our class was assigned one common wetland animal to teach the students about but we also learned about many other creatures both in advance and as we were exploring the wetland with the kids.

Now, as a co-op student in the program, I am able to see just how much students can take away from the program if they participate. The ECO-Shores program is giving me the opportunity to test my leadership abilities in the field. I am able to work on my organizational skills and grow as a person through the jobs assigned to me by my teacher. The time spent as a co-op student in the class has me thinking that more schools need more programs just like this one and I am hoping to



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one day be teaching a program just like this in a high school.

All in all, I'd say that ECO-Shores was and is an extremely influential part of my life and I think it has helped to put me on a path that will lead to an enjoyable career down the road. It has opened my eyes to job possibilities and

experiences that I had never even heard of before. As an ECO-Shores alum, I can say that I am happy to have taken the course, I would recommend it to anyone and everyone, and I would be happy to be part of the program in any way I can in the future.

*Nic is an 18 year-old outdoor enthusiast who has grown up fishing, hunting and camping. He hopes to take this passion into a future career in teaching or guiding. To his great excitement, he has just received acceptance into the Outdoor Adventure Leadership program at Laurentian University.*



## **TERRA**

*Timiskaming District Secondary School, New Liskeard  
District School Board Ontario North East*

**By Bruce Murphy**

Target Size of Group:	16-21
Nature of Students:	Initially a college-bound program but morphed into more at-risk kids
First Year Offered:	1994
Time of Year Offered:	Spring
Time of Day Offered:	Daily, full day
Frequency:	Annually
School Population:	750
Additional Course Fee:	None

### **Credits Offered:**

- SVN 3M: Environmental Science (university & college)
- SVN 3E: Environmental Studies (workplace)
- PAD 30: Physical Education: Outdoor Activities
- IDP 30: Interdisciplinary Studies: Ecological Investigations

### **Major Outdoor Experiences:**

- 24-hour solo
- 3-day winter camping
- 24-hour duet
- 24-hour 5-person pod
- 1-week canoe trip in Temagami
- 5-week field experience mentoring Grades 4 and 7 students at a bird banding lab

### **Leadership Opportunities:**

- Mentoring elementary students for 5 weeks re bird banding at Hilliardton Marsh

### **Other Key Elements:**

Many partners:

- Hilliardton Marsh Research and Education Centre
- Ducks Unlimited
- Ministry of Natural Resources
- Timiskaming Stewardship Council

### **Major Challenges:**

- Course has been cancelled due to declining enrolment and the blossoming of several Specialist High Skill Majors (SHSM)
- The loss of Grade 13; mandatory credits now compressed into four years of high school

## THE SCHOOL OF FLOCK



When people ask me about what I teach, I puff out my chest, clear my throat and declare without too much arrogance that I teach a bird course. The ensuing laughter usually keeps me grounded, but there is nothing in my life that I have ever taken more pride in than teaching an integrated program. Nothing in the months of organizing and dreaming as we put together the pieces of our integrated program prepared me for how Terra (the name of our program) was going to change my life and the many participants I had the fortune to “share the trail” with.

When Terra began, there was little talk about nature deficit disorder and Xbox; cell phones were unheard of. To my knowledge, the Internet did not exist, and I thought Google was

a spelling game with a timer that I was never very good at. (Apparently the game is called Boggle.) Expressions like tweets, posts, hashtags, selfies, snap-chats, OMG, YOLO, and LOL were not on the horizon. I thought the key was teaching the song and the path of the paddle. This would be a gift to help kids find their own paths in life while benefitting from the power of a positive group of peers in the most formative years of their lives. I had no idea how powerful the influence of a positive group could be and how keenly students want to form and be the best group they can be. The other powerful realization was that the best place to allow students to become the best they can be is in the outdoors, challenged by authentic and engaging situations allowing them to experience, learn, and thrive.



My love of integrated programs has allowed me to travel to many boards to chat with teachers who want to start up similar offerings, and perhaps for me the most influential moment in my career was the chance to go to two integrated program gatherings that brought together teachers actively teaching these programs. The first was directly after teaching my first year; it was amazing to see what other like-minded teachers were doing. At the time, there were about 20 such programs in the province and I was a total rookie taking in what all of these amazing programs and teachers had to offer. The common connection was the passion of all of the teachers and their ability to combine courses that complemented and reflected their strengths and passions. Perhaps that is one of the things I love best about integrated programs: the diversity of combinations of courses and philosophies. Another current that ran through these programs was that they were constantly evolving to meet the challenges that the Ministry and local administrations and even collective agreements held in store for these programs. If a program cannot evolve, it cannot survive. Perhaps the most significant challenge these programs faced was when we lost Grade 13, forcing many students to conform to a four-year program with significantly less time for an integrated program.

Back to the nitty-gritty of Terra. When we started out, we were a tripping program and I loved it. Canoeing and hiking in the Temagami back country, mountain biking, high ropes course and rock climbing at the Halliburton Forest, and whitewater paddling at the Madawaska Kanu Centre – all the eco and ego challenges any program could muster. We also started a field experience component of the program. Little did I know how this would change the ebb and flow of what Terra was to become. High school credits are eligible for six weeks of field experience to allow students to achieve any curricular expectations. Armed

with this knowledge, we set up five weeks of field experience at various establishments in our area. These included working with the Ministry of Natural Resources, a local fish hatchery, an eco-resort, a fishing lodge and a recently created Ducks Unlimited marsh located about 20 minutes from the school. The marsh opportunity proved to be the turning point in our integrated program and will be the focus of the rest of this article. From here on, we are talking about “the school of flock.”

Two things came together for us at the same time. Ducks Unlimited was interested in what non-waterfowl species were using their new Hilliardton Marsh and I have my bird banding permit with the Canadian Wildlife Service. Ducks Unlimited had the funds to purchase our first eight mist nets to allow us to catch and band songbirds. To be honest, it started out as the student’s least favourite placement because I would drag them out of bed at six in the morning. Parents loved it as they felt it taught their children important life lessons ... they liked it even more when, in later years, I could drive a bus out to the marsh thereby saving them that early morning commute. The first year, we caught 427 birds and we thought we were amazing. We were the only banding organization in northeastern Ontario, the closest banding lab was near Collingwood and the other northern site is Thunder Cape located 14 hours to the west.

To prepare kids to band birds, I added a hefty avian component to our Environmental Science course, with the final exam requiring students to identify 120 birds by sight and 50 birds by call. The students also needed to be trained on how to safely take birds out of the nets; this is a sizeable learning curve requiring hands-on practice. We also took advantage of the breeding bird atlas project that was being done in Ontario. This five-year study meant that any of my students who were good enough to help out with bird surveys would get their name



printed in the book — a big deal for Grade 11 students.

In order to band birds at the marsh, we built a great partnership with the Ontario Ministry of Natural Resources, Ducks Unlimited and the school board. In order to band birds, we had to have a place to get out of the elements and so my students, with funding from the MNR, were able to build a small building to keep us dry. I found that construction projects with students is an amazing process; they did it all. They would come up with plans and budgets, write funding applications and essentially make things work. Since I did not know which end of a shovel or hammer to use, my job was to trouble shoot any of the ideas and to make sure they were safe. All of the projects at the marsh were done by Terra students and each year's class came to want to leave their positive mark, making the marsh more accessible to people and to decrease the footprint that visitors would have on the marsh.

Shortly after we started banding at the marsh, friends of mine who were elementary teachers started to ask to bring their classes.

My high school kids would take care of the younger kids and help them to learn about birds and the wetland itself. Three visits soon became ten and, before we knew it, we had school visits every day we were there for field experience. We now average 22 visiting school groups each spring and usually the same number in the fall. Our focus is on Grade 4 and Grade 7 students because the curriculum is best suited for those grades. We also have some high school classes come out.

Watching high school-aged kids taking care and mentoring the Grade 4s and 7s will for me be the only enduring learning that will ever really make sense. In recognition of our efforts, Ducks Unlimited invited us to become one of the first Wetland centres in Ontario and that partnership has helped us a great deal in our endeavours to educate students about bird conservation and wetlands. Over time, we have been able to network with other wetland centres in Canada and in Ontario, getting together at conferences in Winnipeg and southern Ontario. We were even able to have one of the other centres come up north and get

a chance to see our marsh and get introduced to banding and our wetland.

One unanticipated consequence of the work of the students was that the general public, perhaps based on their kids visiting the marsh, wanted to learn about the marsh and our bird banding efforts. In 2000, we started banding owls and the public interest was huge but, once again, because of the skill needed to take birds out of the nets, past students needed to supply the person power to run our owl banding program. Every year, we have over 800 visitors come to view our owl banding research. Visitors also come on weekends and our students freely give up time to show adults and kids alike what it is we do. I am not sure if anyone has done any research on the “bird-in-the-hand phenomenon” but we have a generation of kids in our area that have had a chance to safely hold a bird after it has been banded and before it is released back into the wild to make its way along the river of migration.

Watching a grandparent and their grandkids see a bird up close and release this bird with such care and compassion never fails to give me hope for our future. In an effort to build on this hope, our public banding and research has taken us to the point now that we have an organization made up of volunteers called the Hilliardton Marsh Research and Education Centre that, to my delight, currently has three former students on its board of directors. Last summer, through a partnership with Ducks Unlimited, the aforementioned Hilliardton organization and the Ministry of Natural Resources, we were able to hire four students and a crew leader. Three of the students hired were past Terra students and the crew leader is a past student as well. I felt this was worth mentioning to demonstrate that, while this was never anticipated when our program began, it reflects the power and evolutionary nature of integrated programs. Their abilities to grow and morph in directions we cannot anticipate

yet at the same time capturing the essence of outdoor education and creating opportunities for young and old to be influenced and moved by nature, in this case birds, is I feel an extraordinary movement to be a part of. As a teacher, I was in the right time at the right place with the right combination of skill, passion and luck to be able to be a part of something wonderful. My fondest hope is that this article may prompt some rookie teacher who has the passion to connect with me and start their own integrated path.

The last point I wish to make is that whatever courses and skills you bring to your program, it is ultimately about making connections. Birds for us were the conduit to connections. Birds connect people to nature. If a person holds a bird and becomes concerned about the precious heart beating near the tips of their fingers, they may become more interested in the ecosystems and biomes that support the life they gingerly hold. It is also about the connections that happen within the group of students and the connections that you will make as a teacher with students, parents and volunteers. Recently, I have had the chance to to get trained to band a new species. I had the chance to get my permit to band hummingbirds, and traveled to West Virginia to get my certification. Everyone I met there was connected by their love of hummingbirds and it all became so clear to me that connections are what I have been trying to teach my whole career. The man who was training me is an elderly bander from Alabama named Bob Sargeant; he spent more time talking to me about philosophy than the skills I travelled so far to learn. He kept gently telling me about how everywhere he traveled, he met people who passionately cared about nature and how blessed he felt he was, that he was in a position to meet so many wonderful people who shared that love and excitement of nature. So there it is. As integrated teachers and outdoor educators, we are uniquely situated to help foster those connections.



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I am close to retiring now and can look back at a career of making connections not necessarily even realizing that was what I was doing. I watch my dedicated colleagues at staff meetings with the greatest of intentions working through the maze of success criteria, anchor charts, school improvement plans,

board improvement plans, and individual education plans, attempting to get through to students and make a difference. For me, the answer is so much simpler than all these Ministry initiatives, and that is why I teach a bird course.

*Bruce lives on the shore of Lake Timiskaming and he plans to band his brains out when he retires in a year. His fondest hope is to continue the great work volunteers do with kids at the Hilliardton Marsh Bird Research and Education Centre. Beyond banding, his other greatest hope is to watch the Leafs win the Stanley Cup with his son. ... It's a good thing he's not holding off on his retirement until this event occurs ...*





*JOURNEYS into RELATION*



# Touching Base With Parents — Neglected ICP Stakeholders

By Grant Linney

*This article first appeared in Pathways, The Ontario Journal of Outdoor Education, Fall 2011, 24(1) p. 35-36.*

## Introduction

My purpose here is to introduce readers to another key and to-date largely neglected stakeholder in high school Integrated Curriculum Programs (ICPs). If we wish to have a deeper understanding of their unique, powerful and lasting impacts, we must include the perspective and input of participants' parents.

My hope is that this article will encourage much more research in this particular area.

My caution, both to myself and to future writers, concerns a delicate balancing act between enlightenment and suffocation. There is no doubt in my mind that, with the 'right' combination of teachers/leaders, participants, outdoor and experiential programming, setting, and parents, these programs become transformational in their permanent impacts upon life skills and attitudes. To examine these elements in a variety of ways is well worth the effort, but, understand that one must also leave space for certain 'real intangibles' including affect and magic; an over-scrutiny of such phenomena can lead to their demise.

## Context

On a Friday afternoon last February, seven parents and one former student met with me at a Guelph cafe to discuss ICP programs. All were connected to the well-established Grade 10 ("CELP") and/or Grade 12 ("Headwaters") semester-length programs run by Guelph Centennial teachers Mike Elrick, Katie Gad, Janet Dalziel, and Joel Barr. I was already familiar with these particular programs due to multiple visits and conversations with

teachers, parents and students over several years.

Thanks to Katie Gad for sending a notice to parents of present and former students about this gathering. Thanks also to those parents who took the time to participate. Their six families all have at least two offspring who experienced one or both of these programs.

## Observations

The parents attending had a strong desire to share highly favourable impressions of the ICP experience(s) for their offspring. Words like *transformative*, *life altering* and *life changing* (three parents used the last descriptor) were used to describe the impact of these programs.

These parents identified the following attributes within their sons and daughters as being significantly developed thanks to the CELP and/or Headwaters programs:

- More developed people/life skills, particularly in making and keeping new friends, group dynamics and leadership. One parent noted, "*The relationships and bonds define the experience so much.*" Another spoke of how these friendships are deeper and lasting.
- Maturity, accountability, ownership, flexibility, integrity, respect, awareness, balance
- Self-confidence, empowerment
- Social conscience
- A powerful sense of place that students develop and feel for their community
- Practical skills relating to sustainable living



- A much-enhanced ability to see and make connections between here & now concerns and the bigger (in many cases global) picture

The parents identified the following aspects of these programs as being responsible for this great impact:

- The attributes of the ICP leaders: they are gifted teachers, knowing how and when to effectively frame experiences. They are practiced at group dynamics, knowing when to hover in the background allowing the group to wrestle with issues and challenges, and when to draw meaning from their experiences. They really know the students. They have excellent listening skills, particularly one-on-one. They possess humour and they expect accountability. They walk their talk. They have impeccable judgement as to the physical and emotional safety of their charges.
- Particular note must be made of the great fondness and respect these parents expressed for teacher Mike Elrick, the founder and driving force for both of these programs. Mike lost his life to cancer in the fall of 2009. He is remembered as a low key but high impact person, a third parent, and also one who taught the parents about letting go. A leader from behind. One whom the students never wanted to disappoint. One who also knew the importance of keeping principals and superintendents in the loop.
- Extended wilderness trips (snowshoe travel & winter camping; canoe tripping), fostering a deeper connection to the outdoors
- A classroom that is away from the normal school setting and that includes ready access to both natural settings and the home community

- The kind of learning (experiential; authentic; integrated) and the kind of conversations that follow (effectively facilitated by experienced teachers)
- A strong connection to the local community by way of teaching younger students, making presentations to parents and the public, and carrying out environmental service projects
- Opportunities to develop new and potentially lifelong skills such as canoe tripping, winter camping, sewing (e.g., moccasins), and a much heightened awareness of food skills including the 100 mile diet. More than one parent spoke of how sons and daughters are now proudly preparing meals for their families, along with mini-lectures on healthy and sustainable eating.

When asked to discuss concerns as to the future of ICPs, this group identified the following:

- The great need for advocacy on behalf of these programs, and for utilizing parents as a powerful voice in this regard
- The value of using parents to help with specific aspects of the program. It was suggested that a “gifts bank” be created wherein parents can make the ICP teachers aware of particular skills they possess
- The value of establishing community partnerships
- The great importance of effective and ongoing communication with all stakeholders, including other students and their parents in the feeder schools. This is needed in order to offset a variety of negative perceptions that include seeing the program as elitist, lax, and/or virtually impossible to include within the confines of a four-year high school program

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- Major funding challenges, particularly with the recent Ontario Ministry of Education ruling as regards no extra program fees.
- An expectation that graduates of such programs transfer their newly developed skills and attitudes back to the home school setting.

### **In conclusion**

The parents of ICP students represent a powerful and underused source of insight into and advocacy for these transformational programs. Significant research is needed in order to capitalize upon this potential. Their voice is sorely needed in order to move these programs from their current peripheral and precarious status in our secondary schools.

*Grant Linney is a career outdoor and environmental educator who has observed and written about ICP programs for many years. He is particularly intrigued with the transformative power of such extended experiential programs for adolescents. Each summer, Grant joins Mark Whitcombe in teaching the OEE AQ Course offered through Lakehead University. Grant is a lifetime member of the International Save the Pun Foundation.*



# Energy and Knowledge: The Story of Integrated Curriculum Packages

By Bert Horwood

*This article first appeared in Pathways, The Ontario Journal of Outdoor Education in June 1995, 7 (4), 14-18. While answers to many of the questions raised by the author have since surfaced, this article remains a centrepiece of thinking on integrated curriculum packages.*

## 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 keynote address I gave to that meeting, is intended to set the stage for future articles on curriculum 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 Pieh.

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 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 students' 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 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.

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. Teachers' 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 the 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 program 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. 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 works 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 there was a road and bridge over the stream just 50 metres 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 cannot 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 responsibility 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. For example, Karne Kozolanka (1993) reported the pride felt by students in a Construction Trades program in Frontenac County as they described that 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 building a 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 consequence of action which cannot be evaded. A teacher or parent cannot get them off the hook. This characteristic helps to develop the six central factors.

***Personal growth*** refers to students making personal meaning. This 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 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 demanding 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 the 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 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 student 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 programs 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 programs. There are community resources that can be tapped, and many parents are willing 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 within the conventional framework 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.

**Editor's Note:** More recent articles on integrated programs may also be found in issues of Pathways, The Ontario Journal of Outdoor Education, posted on the website of The Council of Outdoor Educators of Ontario (COEO) at <http://www.coeo.org/pathways-journal.html>

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*Established in 2013, the Horwood Canadian Student Outdoor Education Conference is a national student forum hosted annually by Queen's University. College, Undergraduate, B. Ed. and Graduate students from across Canada meet to present and hear various outdoor education research topics and related activities.*

*Among many other things, Bert follows the wise teachings of Quakers and the random trickster whimsy of Coyote.*

