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SchoolNet

FALL '99

OFF-LINE SCHOOLNET'S MAGAZINE FOR THE EDUCATIONAL COMMUNITY



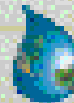
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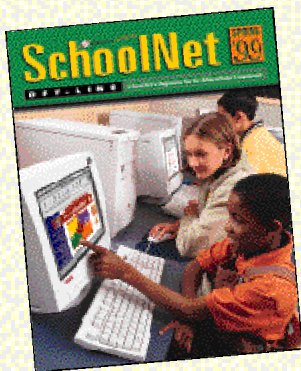
SchoolNet

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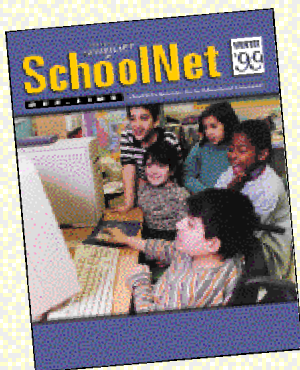
O F F - L I N E

SchoolNet's Magazine for the Educational Community

Here this Fall



SchoolNet Off-Line is a high-quality publication — the first of its kind — dedicated to the application of the Internet for classroom-based teaching. SchoolNet's innovative partnership has successfully made Canada the first nation in the world to connect its schools and libraries to the Information Highway. SchoolNet supports the effective use of information and communications technologies so that young Canadians develop the skills and competencies required to succeed in the knowledge-based economy. But to harness the full potential of the Information Highway in learning, teachers need the know-how. Off-Line's tight editorial focus addresses the needs of readers' special interests. It is all about teachers talking to teachers.



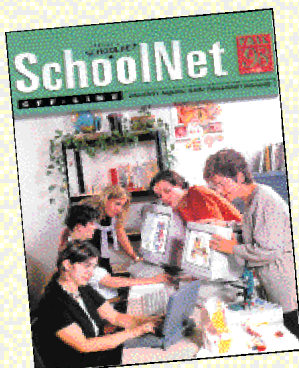
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by Neil Kelly



SchoolNet's GrassRoots program has caught on like wildfire among Canada's educators and students. Just why is that?

One reason is that GrassRoots is the product of the teachers and students in today's schools — the grassroots, in fact — not just another government handout.

As an educator privileged to have been involved with GrassRoots from its inception in 1996, I have watched the program grow and mature. I remember how, in the earliest days, a nagging question preoccupied us: "We're getting computers and the World Wide Web into our schools... Now what?"

GrassRoots was the answer. In creating the program, SchoolNet tapped into the innovative expertise of teachers in classrooms around the nation who, on their own, had already begun finding practical ways to integrate information and communications technology (ICT) into the curriculum in meaningful ways that reach and motivate today's students. The next step was to showcase the work of Canada's classroom innovators.

We dreamt that there would one day be a huge pan-Canadian collection of GrassRoots projects that teachers could draw on and add to — a collection of classroom-tested projects spanning the curriculum from Kindergarten to Grade 12, meeting every learning need and addressing multiple learning intelligences. To see that dream coming true, now that many provinces and territories have adopted GrassRoots, is wonderful. Through GrassRoots projects, teachers and students share local history, concerns and culture with Canada and the world. Canadians together are creating a collection of world-class projects that enhance learning with ICT.

Another reason for GrassRoots' success is the high quality of the individual projects. Many teachers creating innovative GrassRoots projects have received awards both at home and abroad for their contribution to teaching excellence. Many GrassRoots projects have won top prizes in international competitions, as well, for the high standards they set.

Yet another reason for the success of GrassRoots is the practicality of the projects. For the teacher looking for effective tools, the GrassRoots collection includes process-oriented projects designed to facilitate students taking charge of their own learning — projects that students design, program, co-manage and run all on their own. There are projects that reach out into the community to partner with local businesses, and others that engagingly involve senior citizens. There are problem-solving-specific projects, in which students create and maintain new tools and resources for their own learning. There are interactive, collaborative GrassRoots projects in which spontaneous learning communities come into being among students down the road or around the world from each other. The list is almost endless.

In this issue of *SchoolNet Off-line*, we bring you the latest news about GrassRoots and share but a few of the thousands of projects being developed in Canada's classrooms. It is possible for us to touch only on a fraction of the exciting projects in the multidimensional GrassRoots collection, so check out more innovative projects showcased on SchoolNet's GrassRoots web site (www.schoolnet.ca/grassroots).

Meanwhile, in print, online and in your classroom, we hope you will join us as we celebrate the success of GrassRoots.

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Communities@ca

brings communities together on the Web

by Jennifer Fowler

On June 18, SchoolNet's GrassRoots Communities@ca, a national competition open to all K-12 Canadian schools, announced its first winners. The competition called for students to work with their local community to create a web site to showcase the place where they live.

The competition recognized two national winners under the Capital Cities incentive, 10 honourable mentions and five national winners. These awards went to schools that successfully created a web site that gave real insight into what makes their community a special place. A full list of the winners is available at www.communities.ca

But what about the classroom impact of this project? The competition engaged students in many areas of the curriculum, from history to writing. The sites were entirely created by students and involved them in distinct project-based learning activities. The students researched the arts and culture, geography, history, economic life and environment of their own communities, and creating the sites required hands-on learning of information technology, writing and graphic arts skills.

The purpose of GrassRoots Communities@ca is to have students build a unique and relevant Canadian resource on the Internet, collaborate with other students and teachers across Canada, connect with their local communities to build partnerships, develop skills in

information and communication technology, be creative problem solvers, learn to work as a team on a common goal, and, not least of all, have fun while learning. "Through the GrassRoots program, we recognize the achievements students and teachers have already accomplished. Communities@ca's goal is to provide more incentive and to reward these accomplishments at the national level," says Jennifer King, a program officer with GrassRoots.

Montague, P.E.I.

One of the winners under the Capital Cities incentive was Montague Intermediate School in Montague, Prince Edward Island. Charlotte Bryand, the technology teacher at Montague, sees this competition as an excellent way to get students to learn more about their community. She adds that the community had already developed a comprehensive web site, so she wanted her students to take a different approach.

"I didn't want to reinvent the wheel when it came to this project," says Bryand. "I felt this project was a good way for the kids to get to know their community, and I wanted it done right."

Bryand's students made researching the people of Montague their primary focus. They interviewed senior citizens on how the community has changed over the years, local entrepreneurs on how to set up a small business, and a girl who had just moved to the community on a newcomer's viewpoint of Montague. The students really got to know the community better and learned to take pride in it. They made this pride a part of their web site.

"A lot of students don't know their community until they are forced to study it," says Bryand.

Bryand feels her students gained several things from the project: pride in their community, enhanced HTML skills, knowledge of the power of technology, and empowerment because they contributed to something important.

"I use computers in everything I teach," says Bryand. "The site provided the kids with a great sense of accomplishment. It feels good to win." Thanks to GrassRoots Communities@ca, the students of Montague are now ambassadors for their community.

The sites for this competition were judged on their content (scope and depth), design, technical applications, interactivity with the community, value to others, level of community involvement, creativity and goals. The best sites were the ones that involved collaboration at the community level.

Fort Nelson, B.C.

Fort Nelson is a small town in northern British Columbia. Judith Kenyon is the editor of the *Fort Nelson News* and she wanted to do something to put Fort Nelson on the map. She approached Mike

Gilbert, the technology teacher for R. A. Angus Elementary School and Fort Nelson Secondary School, opened her cheque book and provided the school with the equipment to help them produce one of the sites that received an honourable mention in the competition.

Kenyon asked Gilbert to let the kids do as much for the community web site as possible. He responded, "Let's let them do it all!"

"We're a very small pond here. We only have a couple hundred kids," explains Gilbert. "The paper provided the means and the kids led the way."

In order to produce an award-winning site, the students of Fort Nelson had to begin from scratch. They received the equipment, installed the operating system and the software, and set the whole thing up.

"I'm not allowed near the machine to change a thing without the permission of our student web master," explains Gilbert. "The kids just took over."

By developing the site, the students of Fort Nelson were able to provide a window for the world into the community. It also allowed the students to appreciate each other's work and earned them a certain amount of peer recognition. Students who wouldn't normally "toot their own horn" are now in demand to share their expertise.

Gilbert sets high standards for his students when it comes to the use of information technology. He believes his role is merely to facilitate, and to ensure the students are on the right track.

"I take neither credit nor blame for their projects. If something goes wrong the students deal with it, and if they do well, they take all the credit," says Gilbert.

"The attitude is that if it comes from Fort Nelson, it's going to be limited in some way. This program helped the kids to see that they can compete with schools in the Lower Mainland and win!"

Gilbert and Kenyon both shared the same goal when it came to promoting Fort Nelson through Communities@ca. Kenyon supplied the means, and the students, with Gilbert's guidance, successfully produced the end product.

All participants of SchoolNet's GrassRoots Communities@ca competition had something to gain from participating. The schools that contributed to Communities@ca now have students who can use a wide range of processes, techniques and tools to gather information, solve problems, and create and evaluate products. The students can now communicate better and use open-ended problem-solving and decision-making strategies in a variety of settings. They can develop and apply skills in information technology, research and writing for the web, and they realize the uniqueness of their community.

Teachers also gained a lot. They can now facilitate the integration of information technology as a teaching/learning tool in the curriculum, as well as work on a team within the local community to design a site that benefits everyone.

Finally, members of the community are now considered mentors and partners to their schools, and they realize the positive impact information technology can have on their community. The web sites highlight specific local interests and activities, such as events at city hall, local newspapers, radio or television stations, local businesses and upcoming community events. Most importantly, the site enables the community to share in this unique experience with the children.

Jennifer Fowler studies journalism at Mount Royal College in Calgary, Alberta, and is on special assignment with Canada's SchoolNet.



Canadian Heritage Interactive Journey geared for success

On April 15, Governor General Roméo LeBlanc officially launched the nine-week Canadian Heritage Interactive Journey (CHIJ), a cross-Canada bicycle journey with a twist.

By June 15, three cycling teams and more than 1,200 schools across Canada had been connected through the Internet to turn Canadian geography, history and culture into an exciting adventure for students. Travelling to every province and territory, the cyclists

stopped at 80 host schools to post on the interactive web site stories, interviews and other community-related information as researched by the students themselves.

"It brings social studies alive. Anytime that children are enthused and engaged, that's when they are truly learning," says Karen Dyke, Grade 5 teacher at Alouette Elementary School in Maple Ridge, B.C., a host school.

The CHIJ also introduced students to the Internet and helped them develop basic technology skills, from using e-mail to designing web pages. Industry Canada supported the development of these skills through SchoolNet's Junior GrassRoots Program.

For more information, check out the CHIJ web site (www.chij.com).

Keys and buttons, switches and clicks. Attach a mind and you have power! But without the mind you have only a collection of buttons. That power is the mind behind the keys, the human factor, the “Ah ha!” and “Ha ha!” of lifelong learning, and it is what Tools for Tomorrow (TFT), a New Brunswick-based GrassRoots project, is all about: the power of a good teacher coupled to the limitless potential of technology.

In January, teachers from New Brunswick School District 13 took their first baby steps toward enhancing their existing pedagogical and technological teaching repertoires. Their task was to develop student-centered instructional units to allow teachers and students to acquire new skills and intellectual approaches for transforming information into knowledge. Each unit would be designed to become a resource for other teachers of the same level. The ultimate goal was that tools acquired during the project would become part of the participants’ lifelong learning toolbox and would serve as building blocks for future skills development.

In the first phase of the project, TFT teachers equipped themselves with digital cameras, Pentium computers, printers, LAN and World Wide Web connections, and e-mail accounts, and enrolled in a TFT list-serv. The teachers could get other resources as specific needs from individual projects became apparent. To facilitate smooth start-up technology mentors came to the teachers’ schools on a weekly basis to troubleshoot both technological and pedagogical problems.

In phase two, teachers studied a design model for publishing web-based, technology-enhanced instructional units. During a daylong workshop, TFT teachers also acquired a variety of

instructional strategies, including lesson design using multiple intelligence theory, analogies as a component of critical thinking, and building the constructivist classroom. All in-service sessions included both pedagogy and hands-on technology-related enhancement. For example, when the morning session centered on creating analogies, the afternoon focused on developing the skills needed to construct tables, charts and word webs in Microsoft Office.

In phase three, teachers moved into active research and development, writing and testing initial ideas they would eventually include in their published units. They consulted curriculum documents to match these units to Atlantic curriculum and develop specific topics around these broad objectives. As the third phase ended, teachers were sending draft copies of their instructional units to the project leader for editing and feedback. They created temporary web pages to get a consistent layout and gather graphics for final published material.

Phase four will begin this fall when TFT teachers go into their new classes with technology resources, a strong technology unit to start their year, and a good understanding of the authentic role technology can play in daily class routines. Late in the fall teachers will meet

to debrief the initial TFT program and also to pair up with the TFT class of 2000.

So ends the first cycle of turning keys and buttons, switches and clicks into knowledge.

For more information about TFT and to view instructional units go to <http://www.district13.nebed.nb.ca/toolstitle.htm>

Bill Nugent works for School District 13 in Perth-Andover, New Brunswick.



Teachers build classroom tools for tomorrow

by Bill Nugent

Looking for a teaching job? Try ATTN

Now available — a new and exciting Internet service to help teachers connect with potential employers!

The Apply to Teach Network (ATTN) is the first central registry of its kind, and is a valuable resource for Canadian teachers seeking employment. School boards, hiring principals and private

employers should also tap into ATTN because it is an excellent scouting tool.

ATTN was developed by Canada’s SkillNet, Industry Canada, in partnership with Innovations Media, a division of The Center for Education and Training. For more information, check out the ATTN web site (www.attn.org).



The GrassRoots Program:

“Flexibility and ownership, keys to success”

by Jean Tessier

“We’re getting ready to announce that this program year has been a huge success,” confides Lise Reid, manager of SchoolNet’s GrassRoots Program. “I’m expecting to see that the program has helped to create close to 3,000 projects nation-wide in the 1998–1999 school year. This is a remarkable achievement.”

GrassRoots, launched as a pilot project in 1996, works with provincial ministries of education, and other partners, to encourage Canada’s teachers and students to participate in classroom-based, online projects. Last year, the federal government expanded the GrassRoots mandate, so that by March 31, 2001, 20,000 school online projects will have been produced across the country. These projects will create opportunities for five million Canadian students to develop valuable, employment-related, information and communications technology (ICT) skills.

Administered in most provinces and territories by the department of education, GrassRoots solicits proposals from teachers wishing to develop curriculum-related content through online projects. Approved proposals receive funding that allows teachers to obtain the necessary software, hardware or materials to realize their project goals.

“The keys to the success of GrassRoots are flexibility and ownership. At every level, from the provincial governments to the teachers and students, our partners implement GrassRoots in the manner that is most compatible with their approach to curriculum development. The provincial governments have been very innovative and forward thinking about using GrassRoots projects to integrate ICT skills into classroom curriculum,” says Reid.

Saskatchewan

In Saskatchewan for example, SchoolNet’s GrassRoots has been introduced via a “block project” model. Teachers work together to develop a common block project theme directly related to Saskatchewan’s Evergreen Curriculum. Individual classes then work to research and develop content relating to a specific facet of the broader theme. The result is a curriculum-relevant resource that can be accessed by teachers and students across the province. Using this model of online curriculum support, Saskatchewan’s department of education plans that by September 2001, Saskatchewan students will be able to participate in an online project in every subject from K-12. Lynda Arnush, the Coordinator for the GrassRoots Program in Saskatchewan, readily attributes the GrassRoots model’s success to its flexibility. “GrassRoots is a success here because we’ve had the freedom to develop the model in response to the needs of the province,” she explains.

Newfoundland

In Newfoundland, collaborative, project-based learning is a long established feature of the educational landscape. By the end of the 1998-1999 school year, participating teachers and students across the province produced nearly 300 projects, bringing the province’s total to nearly 620. Increasingly, the focus of GrassRoots in Newfoundland is being directed towards supporting the specific professional development goals of educators.

“We’re really pleased,” notes Bill Jameson, Assistant Director of Newfoundland’s STEM-Net, and a former educator. “The goal for next year is high-quality projects, with closer tie-ins to professional development. The teachers’ associations see it as a valuable opportunity to address their professional development goals. We already have teachers’ projects on next year’s waiting list.”

Northwest Territories

A similar enthusiasm is evident in the manner teachers have taken to GrassRoots in the Northwest Territories. This year, the territory

has seen the development of 12 new projects, with an even greater response expected next year. GrassRoots is administered by the distance education office within the department of education, culture and employment in the territory. In tandem with soliciting project proposals from teachers, the agency has been coordinating the activities of a travelling basic-level computer skills workshop to prepare teachers to work with computers. This strategy is helping to develop the skills infrastructure required to broaden program participation by educators.

“Infrastructure is a great determinant of how the implementation of GrassRoots might evolve,” explains Janice Sargant, the Project Director working with the program. “Those teachers who have taken part have described the projects as very rewarding for both themselves and their students. You can see that the momentum is really building. Next year, we’ll be able to build on what we’ve accomplished by showcasing our results.”

Alberta

In Alberta, GrassRoots online projects have been brought to teachers and students through the program’s integration with the existing TELUS Learning Connection, an Alberta Learning initiative working to help teachers and students make effective use of technology in education. “The online-learning



initiatives in which we were already involved had philosophies very compatible with those of GrassRoots,” explains John Hogarth, the Project Director for GrassRoots in Alberta. “It’s been a very natural fit.”

The key to the successful implementation of Alberta’s GrassRoots program is the participation and support of the province’s 255 “teacher-leaders,” representatives from each school district who help local educators become involved in creating GrassRoots projects. “Through their involvement, the administration of GrassRoots can become much more localized, and projects more effectively developed,” Hogarth explains. As a result of this support system, GrassRoots in Alberta expects to see more than 400 projects completed this year. Hogarth adds, “The level of enthusiasm is hard to describe, it’s so high.”

Based on the excitement she’s seen this year, both from provinces and teachers, Lise Reid is confident that the number of online projects will more than double next year. “There were instances this year where the interest from teachers was so high, that we almost couldn’t deliver enough project funding. I expect the solid relationships we’ve established with the provinces and territories, along with the private sector support generated through the National Campaign, will allow us to help create close to 8,000 online projects next year.”

Jean Tessier is the coordinator for SchoolNet’s GrassRoots National Campaign.

GrassRoots Program?

WHAT IS THE

The GrassRoots Program is part of Industry Canada’s SchoolNet and provides funding to K-12 schools to help teachers develop innovative and interactive learning projects on the Internet that:

- ◆ *foster the acquisition of academic, employability and computer skills in Canadian youth*
- ◆ *build unique and relevant Canadian content on the Internet*
- ◆ *integrate information and communication technologies into learning*
- ◆ *facilitate increased connectivity and training opportunities.*

Students at St. Elizabeth School in Ottawa could hum along knowingly to the song “He’s got the whole world in his hands.”

These students use their hands and minds to reach out to other students across Canada and around the world. In the process, they have met — either in person or through videoconferencing — Prime Minister and Mrs. Chrétien, and Hillary Clinton. They have won first prize in international cyberfairs and have learned through their research and online communications that the *Simpsons* tops the list of must-see television programs for 10–12 year olds worldwide. They’ve also learned that some children, likely those without access to television, cannot attend school because their schoolyard is littered with landmines.

The Ottawa students’ guide on all these journeys is one Dalia Naujokaitis, winner of two Prime Minister’s Awards for Teaching Excellence, and a self-described “nut.”

“I cannot sit still,” says Naujokaitis, who teaches enrichment students from grades 4 to 6. “I’ve always got to jump in with both feet and take risks.”

Naujokaitis has many glowing things to say about the educational benefits students reap from working on GrassRoots projects. They

people ideas and take them through the process of designing their project, including proposal writing, coming up with curricular links and inviting collaboration.

“There may be a lot of people who think these projects are kind of hard to do, but very definitely if you have everything set out, know what your plan is, and provide opportunities for collaboration, there should be absolutely no problem whatsoever,” she says. On the other hand, Naujokaitis cautions teachers not to expect perfection every time. She approaches failure as “just another problem for us to solve.”

Students Against Landmines

And, in fact, problem solving is a large part of the GrassRoots story. For instance, the idea for Students Against Landmines, a project that won first prize in the 1999 International Schools CyberFair, was initiated by students who wanted to make a difference after the death of Princess Diana, who supported this cause. Immersing themselves in the project, the students said, “Kids have power. We can do something.” While showcasing other students’ efforts against landmines on their web site, using Java script and communicating online — and once face-to-face in the classroom — with United Nations officials,

GrassRoots projects fertilize a love of learning

by Karen Zak

gain, she says, thinking and problem-solving skills, and learn about technology, communicating and working on a team. All the strengths the curriculum aims to build “get intertwined just magnificently.”

Naujokaitis is also practical enough to recommend the monetary value of GrassRoots grants of up to \$900, which are available for furthering information technology learning in the classroom.

Aside from the money, Naujokaitis recommends GrassRoots projects as a good way to learn to collaborate or build resources on the Internet. She compares the GrassRoots web site to a cookbook — a how-to site, complete with links to articles and other sites that give



the students also raised enough money to help demine four schoolyards, and will continue fundraising for this cause annually. Typically, Naujokaitis finds that her projects are open-ended and resonate with emotional power and are of great interest to the students. The projects “do not die” but continue to grow in scope each year.

And when students hear that their work will be published for an audience, potentially in the millions, “their writing skills increase dramatically,” she says. Along with the writing, students are learning information and practising skills relevant across the curriculum — and doing so with great enjoyment and enthusiasm. For instance,

while they might find it dull to study the scientific method, students light up when applying this method to a subject they know well: watching television.

Taming the Tube

Taming the Tube is an Internet-based project that Naujokaitis has done with students for years. The students monitor their own television watching for a week and collect and analyze data on what participating children across the world watched in one week. In so doing, they make hypotheses, design questionnaires, plot out means and modes, use spreadsheets, dissect media portrayals of gender stereotypes, write impassioned, thoughtful defences of their favourite shows and familiarize themselves with the areas from which participants hail, whether London, England, or a kibbutz in Israel.

When generating ideas for GrassRoots, Naujokaitis recommends teachers look to the curriculum “especially if they want collaboration.” She views the projects as an extension of what’s happening in the classroom and not something isolated. “We usually ask, ‘What’s in the curriculum and how can we enhance it and deliver it in a new way?’”

It is the students as much as she, herself, who come up with the

If, however, a class wants to publish its findings in the form of a web page, technology comes into greater play and it helps if students have used Windows and know how to make a web page. Knowledge of HTML, the language used to create a web page, while a definite bonus, is not essential. Students can use editing products that do the behind-the-scenes design work for them, or they could team up with knowledgeable classmates. Naujokaitis’s students do not use editing products but one or two children will design a template that everyone uses to ensure a coherent web site.

Publishing on the Internet also draws on design and layout skills and Naujokaitis finds it very helpful to use storyboards with her students. Extending across the blackboard and even the entire classroom, these storyboards chart the progress of the web site graphically, giving students a sense of where they’ve been, what they’re doing and where they’re going. It also gives each one a sense of how they might best contribute. Those unsure of their talents can be placed in a team in which they’d make a difference and grow in self-confidence.

Students do need to be able to work cooperatively, think and evaluate critically, and anticipate and laugh off the frustrations that characterize technology as much as its bits and bytes. Naujokaitis



ideas. At times, depending on the management skills of her students, Naujokaitis acts mainly as a facilitator, helping them to “push ideas even further than they think they can.”

While many children are technically oriented, she says, such skills are not necessary for participation in these projects. The bulk of the work involves researching, writing and testing data. “They’re becoming problem solvers and creative thinkers... What’s exciting is that students create knowledge instead of just consuming it. They have to learn to evaluate the information on the Internet and not just regurgitate it.”

divides students into rotating teams of four or five so that every child has the chance to learn and practise every skill.

“It’s really important to know,” she says, “that the minute you start publishing on the web, kids have to learn all these skills, including respect for copyrighted material. Otherwise publishing will be meaningless or so full of spelling and other errors that it won’t be fit for the Internet. My editorial team will look at the content and say, ‘No, this is not good enough. It needs to be improved.’”

Advertising, too, must be good to be effective. When seeking partners, an advertisement should be placed at least two months

before the project begins. Much like a proposal, information should be included on the date of your project, its content, grade level, and space limitations (perhaps you only want to work with five other classes).

In Canada, Naujokaitis advertises her projects through listservs run by GrassRoots and SchoolNet. For a more international flavour, she goes through listservs with global connections, including IECC, Project Registry with the Global SchoolNet Foundation, and K-12 Opps (which stands for opportunities from Kindergarten to Grade 12). Access to these directories is available through Naujokaitis's various web sites (see below).

Naujokaitis ensures that those interested reply directly to her as she wants to know who is involved. She stipulates a minimum level of participation — at least once a week — to avoid the “phenomenal disappointment” students feel when their hard work and communications receive no response.

After sending everyone acceptance letters, greetings are sent and circulated between the various participants. Class photographs may be exchanged on the Internet but security is a concern and students have learned not to reveal their surnames. They also require parental permission to participate in Internet collaborations.

While some parents have complained that all this computer work may be isolating, Naujokaitis believes it is quite the opposite, giving students the opportunity to interact with a much wider variety of people in so many ways. For Naujokaitis's students, these include creating a historical tour of Ottawa, complete with a tour of its museums, designing schools of the future with inner-city students in Washington, D.C., working on a web site for peace, interviewing local leaders in many fields to distill the essence of true heroism and leadership, founding an online children's news magazine, and highlighting poetry and pictures of Canadian youth on why Canada is cool. Even in May, as Naujokaitis worked to wrap up the year's work and festivities, students pressed her to do more on the Internet.

To find out more...

If you'd like to check out some of the web sites designed by the St. Elizabeth crew and Dalia Naujokaitis, go to the following addresses:

Taming the Tube:

<http://www3.sympatico.ca/dalia/tametube/intro.htm>

Canada's Cool . . . eh?:

<http://www.occdsb.on.ca/~sel/eh/eh.htm>

I Have a Dream: Bridging Diversity & Building Peace:

<http://www.occdsb.on.ca/~sel/dream/front.htm>

Buy Nothing Day:

<http://www3.sympatico.ca/dalia/buy0/buy0day.htm>

One Spirit, Many Gifts: Leadership in Ottawa, Canada's Capital

(first place in the 1998 International Schools CyberFair):

<http://cyberfair.gsn.org/lizzy/index.htm>

Communities@ca, A Capital for All

(“A really cool site,” says Naujokaitis):

<http://www.occdsb.on.ca/~sel/cyberpal/front.htm>

Students Against Landmines

(first place in the 1999 International Schools CyberFair):

<http://cyberfair.gsn.org/mine/index.htm>

One World, Many Rights:

http://www.att.virtualclassroom.org/vc98/vc_47/zine/human/rights.htm

St. Elizabeth home pages:

<http://www.occdsb.on.ca/~sel/>

Karen Zak is a freelance writer who specializes in education. She is currently on contract with TEACH Magazine.

How to apply to GrassRoots

Submit a classroom Internet project and receive

up to \$900 for your school! Explore our site at

www.schoolnet.ca/grassroots to submit

your proposal or join an existing project!



Showcasing innovation in the GrassRoots classroom

by Jennifer King

So, by now you've had a chance to read up on the GrassRoots Program and you're thinking of joining the hundreds of teachers across this country who are designing and implementing their own innovative Internet projects. You know it's a great idea but you're wondering how they integrated technology into the classroom in such a way that wasn't overly burdensome and made learning fun. Well, here for you today are just a few examples of how some teachers have done just that!

Crescentview School in Manitoba developed a project entitled Fit for Life... for the gym class! "I needed to show everyone that physical education can integrate technology as well as any other subject area," explains teacher Lynn Chesney. The grades 3 and 4 students wanted to take a trip around the world... on foot! They decided that for each lap they ran in the school gym

and in the schoolyard they would be one mile closer to their destination of Sydney, Australia. Classes from all over the world joined in on the journey and communicated via e-mail. Students researched the Internet to chart their own routes and plotted their progress on maps in the classroom and on the project web site using HTML and tools such as Paint Shop Pro. The students not only exercised their muscles but also their skills in geography, math, and information and communications technology. Lynn recommends bringing technology into learning: "Go for it! It's a very rewarding experience for the students and the teachers.... It's a win-win situation."

Trying to think of ways to get students interested in learning about their environment? Why not do what the Grade 2 class at Sawmill Valley Public School in Ontario did. They linked their class with 17 other schools all over the globe via their project, Around

the World for Earth Week. On one day of Earth Week, students from each school went on an observation walk to collect information on local weather, flora and fauna. Using the Internet, the students communicated, correlated and compared the data with the other classrooms. The results were then recorded on a project web site and on a large world map in the school hallway using graphs, art work, digital pictures and written work.

Imagine going on a field trip... without leaving the classroom! That's where Bishops College in Newfoundland can take you with its Bishops College Intertidal Zone Field Trip. Teacher Patrick Wells and his Grade 12 students have created an interactive site that lets you explore zones of the marine seashore, examine animals and other organisms in that habitat, go beach combing, and take part in a lab exercise. Students developed their skills in web site design, word processing and photo editing as well as learning a thing or two about animal phyla and trophic levels. Patrick advises "the quality of learning is enhanced by maximum student involvement... Make the students read, talk, write and answer questions."

Come and explore these and other innovative projects in the GrassRoots Project Centre (www.schoolnet.ca/grassroots).

Jennifer King is a Program Officer with SchoolNet's GrassRoots Program

Innovative schools showcase work on SchoolNet

SchoolNet's Network of Innovative Schools has its first 24 members from across the country.

The goal of the Network is to develop the innovative use of information and communications technology (ICT) to improve

learning in all schools. Throughout the 1999-2000 school year, the network's web site will showcase the exiting work of the member schools. Watch for details on research projects examining the impact of ICT on learning, and information about mentoring opportunities.

For more information, check out SchoolNet's Network of Innovative Schools web site (www.schoolnet.ca/nis-rei).

The word *grassroots*, according to the *Oxford Concise Dictionary*, means a fundamental level or source: it serves as a base of foundation and has an effect that is essential, primary and original. SchoolNet's GrassRoots Program aims to give Canadian youth the fundamental skills required to succeed in today's knowledge-based economy. It offers the educational community innovative, Internet-based initiatives and works to build informed, resourceful and successful teachers and students. And, it can do so for schools in all parts of Canada.

Imagine a school situated in the wide-open, rocky tundra of Coral Harbour, which is located on Southampton Island in Nunavut, Canada's newest territory. In Inuktitut — the first language of the Inuit who make up the vast majority of the territory's population — Coral Harbour is called Salliq, meaning a large, flat island in front of the mainland. The population of Coral Harbour is approximately 670 people. Why would these people need information and communications technology skills?

The answer to this question lies in the breakdown of the population. It has been said many times that children are the future of Canada. With children making up close to half of Coral Harbour's population, it is safe to say these children are the community's future.

Neil Burgess, the technology teacher at Sukka, Coral Harbour's school, says that it is common in Inuit communities for the population to consist of a large number of children. Burgess came to Coral Harbour from Newfoundland, and when he arrived he saw a need to engage the students in new ways. He had been a part of several GrassRoots projects in Newfoundland and knew the benefits of implementing technology in the classroom. He just knew that GrassRoots could work wonders in Coral Harbour too.

"It's a different culture here," explains Burgess. "Most of the children here have never been off the island. They're secluded and protected from the influences of the outside world and it's difficult for them to grasp how big a world it really is."



GrassRoots brings information technology to the far North

by Jennifer Fowler

Many elementary children now regularly use e-mail, graphic design programs and other advanced software. Learning these skills inside the classroom prepares young learners for the workplace, and communities such as Coral Harbour are no different than ones in other parts of Canada in their need to prepare their students for the future.

GrassRoots enables Canadian teachers and students to contribute to their communities, raise awareness of global issues, establish partnership and communication links around the world, and take charge of their future while taking advantage of the vast potential of the information highway.

Providing rural communities with information technology tools is one of the benefits of SchoolNet's GrassRoots. It is these communities that have the most to gain by expanding their communication reach.

"I think the program [GrassRoots] is incredibly well designed and thought out," explains Burgess. "There is so much I can do to help the kids to learn."

A social studies teacher can now show the children what the prime minister looks like. Instead of just having a map to teach geography, he or she can now show the students what Africa looks like. The Internet gives them a window into the world. It's a visual tool that will show students parts of the world that they may never have the chance to visit.

SchoolNet's GrassRoots projects are a unique and valuable resource because they are teacher-designed and tailored to the learning needs of students in today's classrooms. The program offers funding to schools (up to \$900) to create and implement innovative and interactive learning projects on the Internet. These projects foster the acquisition of academic, employability and computer skills in Canadian youth. They build unique and relevant Canadian content on the Internet, integrate information and communication technologies into learning, and facilitate increased connectivity, usage and training opportunities.

Burgess has made a GrassRoots project a part of his existing teaching plan, rather than an additional drain on his classroom

time and resources. The project his students have been working on is developing a simple web site for the school. It all seems pretty straightforward doesn't it? But for a school like Sukka there are many obstacles to overcome.

First, English is the second language for the students at Sukka. This fact strongly influenced the planning of the web site because the only version of HTML, the script used to build web sites, is English; therefore, the younger students can not fully participate until they learn the English language. The entire school must work as a team. Only once the students learn English can they begin to learn the language of computers.

Second, when Burgess arrived at Sukka he had to rebuild the computer lab so that the students had the proper equipment to build web sites, but due to the secluded location of Coral Harbour, it was more challenging to gain access to the World Wide Web.

Third, Inuit communities such as Coral Harbour have a distinct way of life and culture. Many residents live off the land and preserve and respect everything that surrounds them. Technology is not always wel-

"I've told them that millions of people will be able to see their Web site and learn more about their community, and that they will be able to learn about the world,"



comed with open arms. "I've had some difficulties with parents who are unsure of what their children are learning. I have to tie it into their way of life," explains Burgess. He shows them how to use the Internet to see what the weather is going to be like if they are going out on the land, and this helps them to decide if it's safe to go out or not.

The students of Coral Harbour are beginning to understand the impact the Internet is having. "I've told them that millions of people will be able to see their web site and learn more about their community, and that they will be able to learn about the world," says Burgess. "They've only heard about it on TV

before and now they can see it."

Teaching something at the grassroots level is the key to the success of SchoolNet's GrassRoots Program. Introducing information technology into classrooms such as that of Sukka is what makes GrassRoots a great success.

Jennifer Fowler studies journalism at Mount Royal College in Calgary, Alberta, and is on special assignment with Canada's SchoolNet.

Steering SchoolNet into the future

The SchoolNet National Advisory Board (SNAB) has plotted the course for SchoolNet over the next year. SNAB members are leaders of various educational associations, provincial ministries of education, researchers and provincial learning networks.

"Connecting Canada's schools to the Internet was a major 'Team Canada' achievement on the part of all our provinces, our territories, and the SchoolNet team at Industry Canada," said Michael Binder, Assistant Deputy Minister at Industry Canada and co-chair of SNAB, at the annual SNAB conference held in late May. "Now, as recommended by SNAB, we need to extend connectivity from schools to the classroom. This is a critical step if we want our children to have better access to online learning resources and benefit from the Canadian information highway."

To prepare for the conference, SNAB members were divided into

five teams to deal with distinct areas in which to make recommendations. The connectivity team concentrated on the "pipe" that carries information and communications technology (ICT) content to Canadian learners. The learnware team focused on improving that content. The professional development of educators team concentrated on showing teachers how to work with ICT content effectively. The research and measurement team questioned if teachers are using content effectively, and how best for teachers to use ICT content in the future. The social issues and community involvement team was engaged with social issues such as copyright, equitable access, and language and culture.

At the end of the conference, each SNAB member selected 10 recommendations they considered to be the most important overall. Due to this well structured selection process, in 1999-2000 Canada's SchoolNet team will concentrate its efforts on the top 13 recommendations.

For more information about the SchoolNet Advisory Board, visit its web site (www.schoolnet.ca/snab/e).



The Connected Learning Community:

the next horizon

by Al Saplys

Stock photos and illustrations provided by Quadrant Educational Media Services Inc.

In today's emerging information society, technology is changing every aspect of our lives. We now instantly access information via the Internet or on CD-ROM discs that, not so long ago, would have taken hours of research. We use PCs for communication, analysis and entertainment. Our children are growing up in a world where the Internet will play a prominent role in every major decision they make — from buying a car to planning a trip.

Governments all over the world are investing energy and resources to ensure that their educational institutions can deliver access to information technology to students of all ages. In Canada,

initiatives such as SchoolNet's GrassRoots Program help promote valuable skills in Canadian youth by integrating information and communication technology into learning. Today's young people are not intimidated by technology. What is required to support them in their academic development is a consolidated approach to providing them with the tools they need to develop invaluable life skills. Supporting these new and flexible approaches to learning will help to ensure their success in the information economy of the new millennium.

At Microsoft, we believe that the single most important use of information technology is to improve education. Even those who have been traditionally cautious of marrying computers with curriculum are apt to agree that resources such as the personal computer, through its evolution into an affordable, full-fledged learning tool, in tandem with the phenomenal growth of the World Wide Web, now provide educators and students with tools that create revolutionary possibilities for learning.

Together, these developments enable students, teachers and communities to create a new learning environment of connected PCs, which we at Microsoft call The Connected Learning Community. This strategy envisions students as having access to a personal computer that is connected online, thereby empowering each student to pursue his or her own individual path of learning in an environment in which students, parents, educators and the extended community are all interconnected.

In this new era of computing, when the advances in technology and the goals of education align so closely, people are offered an unprecedented opportunity to broaden the way they think and learn. Today, it is not beyond our reach to provide every student with access to the world's knowledge and a unique path of learning tailored according to individual needs. Until recently, these goals seemed barely possible. Continuing advances in technology are profoundly changing the ways we access and use information, and unlocking the power of computing for education. Microsoft Canada is proud and excited to be a part of this.

Al Saplys is Education Manager for Microsoft Canada.



Successful GrassRoots experience in Saskatchewan

The Saskatchewan GrassRoots Program has become an important part of Saskatchewan's resource-based learning initiative. The structure of the new GrassRoots Program is the first of its kind in Saskatchewan and possibly Canada. It bodes well for future Internet-based educational resource development projects and provides an effective model for technology integration across the curriculum. Educators and school board administrators from all areas of the province have enthusiastically received SchoolNet's GrassRoots Program.

To find out more information on the how Saskatchewan continues to be a model for technology integration across the curriculum go to <http://www.sasked.gov.sk.ca/grassroots/proj9899/article.html>

GrassRoots-WIER

*partnership connects more students
to Canadian authors*

by Jazmine Hayden and Jean Tessier

More Canadian primary and secondary school students will have an opportunity to share their writing and receive creative feedback from well-known, professional Canadian authors thanks to a joint project launched by Industry Canada's SchoolNet GrassRoots Program and Writers In Electronic Residence (WIER).

A special version of WIER, an initiative allowing young writers to work with Canadian authors through the Internet, will be available to schools through SchoolNet's GrassRoots Program. GrassRoots has been providing funding to schools for teachers to develop and implement learning projects for their students with the Internet since 1996. The online projects help students develop skills in critical thinking and teamwork, as well as skills in information and communications technology. SchoolNet's GrassRoots will help support the WIER initiative by providing a \$300 contribution for each participating class.

"Writers In Electronic Residence is very excited that this new partnership with GrassRoots will give schools a chance to try the program," says Trevor Owen, who initiated WIER as an online writing project in his classroom 11 years ago. "This new partnership focuses on the integral role of the teacher in developing online experiences in the classroom."

***"Writers In Electronic Residence
is very excited that this new partnership
with GrassRoots will give schools a chance
to try the program."***

During the 1999–2000 school year, teachers and classes will be invited to establish a GrassRoots project for their classroom. They will join one of a number of special four-week online writing workshops with WIER. The writing workshops are divided into three levels: Write With You for grades 1 to 6, Word For Word for grades 6 to 9, and Wired Writers for grade 9 and up. Participating classes and their teachers will choose and submit five original pieces of writing to one of more than 50 Canadian authors on the WIER web site. These professional authors and up to 14 other classes from across

Canada will review the works and respond with their comments, creating a learning forum for discussion.

As part of the project, each class will also design a web site to be hosted by WIER. The web sites will incorporate sections such as class feedback on writing from other classes across Canada, descriptions of what students learned from sharing their work with professional authors and other classes, and audio clips of students reading the pieces they shared.

The WIER project is administered by the Writers Trust of Canada, in partnership with York University's Faculty of Education. Hundreds of schools from across Canada, involving some 30,000 students, have participated, along with more than 50 professional Canadian writers, since the program began in 1988.

Canadian K-12 schools that have not previously participated in other WIER programs are eligible to participate in the WIER/GrassRoots project. Access to the web is required, including the ability to send e-mail with a web browser. The available spaces are plentiful, but limited, and will be filled on a first-come, first-serve basis. Also, to encourage geographical diversity, availability of spaces will be determined by region. The participating classes will be selected from entries to the WIER Canada Book Day Contest. WIER/GrassRoots will select as many schools as possible, according to the above criteria.

For more information about the contest visit the Canada Book Day web page at <http://www.wier.yorku.ca/~wier/cbd99.html> or check out the WIER home page at <http://www.wier.yorku.ca/wierhome/>

Jazmine Hayden studies public relations at Mount Saint Vincent University in Halifax, Nova Scotia, and is on special assignment with Canada's SchoolNet.

Jean Tessier is the coordinator for SchoolNet's GrassRoots National Campaign.



“The SchoolNet GrassRoots National Campaign really represents the dawn of a new era in government and private sector cooperation,” says Élise Boisjoly, Executive Director of Industry Canada’s SchoolNet. “Partnerships like this can achieve goals that might be nearly unattainable without the buy-in and support of both the public and private sector.”

The GrassRoots National Campaign is a sponsorship initiative to raise \$15 million from Canada’s private sector to support the goals SchoolNet’s GrassRoots Program. GrassRoots, in concert with its provincial partners, is working to foster the creation of 20,000 teacher-designed online projects by March 31, 2001. These projects, in turn, will create opportunities for five million young Canadians to develop valuable and employment-related information technology skills.

Launched in October 1998 at an event attended by Industry Minister John Manley and Chairman and CEO of Microsoft Bill Gates, the campaign received its first demonstration of support when Microsoft Canada announced that it would contribute \$1 million in funding. More recently, while touring a Saskatoon high school, Prime Minister Jean Chrétien challenged Canada’s private sector to support the campaign. During his address, he also made a point of inviting the participation of companies of all sizes.

Boisjoly readily agrees. “This campaign isn’t merely an appeal to large companies for funding. To reach its goal, this campaign has to create opportunities for all Canadian businesses to get involved in supporting the development of skills they’ll require future employees to possess. Support means private sector funding, but it also means guidance and promotional support. The availability of skilled knowledge workers will be a great determinant of the success and

Government helps young Canadians develop IT skills with help from private sector

by Jean Tessier

“Through their involvement in SchoolNet’s GrassRoots, my students have used information-age technologies effectively to acquire higher-order thinking skills to do research, to learn and to absorb complex concepts in creative ways,” she explains.

Launched as a pilot project in 1996, SchoolNet’s GrassRoots Program, working with its provincial partners, has to date realized the creation of more than 3,000 online projects, involving 30,000 educators and nearly 750,000 students across the country. The program is a vital component of the second phase of SchoolNet’s mandate: to extend connectivity from the school to the classroom level.

“We’re extremely proud to be able to say that, thanks to the efforts of our partners — provincial governments, private sector and education organizations and institutions — every public school and library that wanted to be connected now is,” adds Boisjoly. “The challenge now is to support and encourage the use of these technologies by teachers and students at the classroom level. I expect the private sector to see the value of building Canada’s future workforce, and to be very supportive.”

Jean Tessier is the coordinator for SchoolNet’s GrassRoots National Campaign.

growth potential of Canadian enterprise, and of the Canadian economy over the long term. The private sector wants to get involved in this kind of partnership, and this model allows for it with the blessing of educators.”

From an educator’s perspective, Indu Varma, a teacher at Marshview Middle School in New Brunswick, describes how the GrassRoots model of teacher-led online projects has proven itself a valuable tool for broadening the range of educational possibilities in the classroom.

Survival tips for the first-time GrassRoots teacher

Determine the activities and events that will take place at each stage of the project; set out the expectations for other participants in your project — Who? What? When? Where? Why? How? It is important for teachers to collaborate with other teachers and classes and to set clear, realistic goals for the project.

Set appropriate timelines for all parts of the project, and make sure there is time to adequately cover each area. Expect the unexpected and be prepared to encounter unforeseen events and delays; devise creative ways to include your students in all stages of the project.

Most importantly, enjoy the experience! It’s all part of the fun and the learning process for the teacher and the students.

Check out the Teacher Toolkit at www.schoolnet.ca/grassroots

Two school web sites recognized as best on the Net



Congratulations to the teachers and students of Worsley Central School in Worsley, Alberta (www.geocities.com/~worsleyschool/pgzero.html) and École secondaire Joseph-Francois-Perrault in Montréal (www.csdm.qc.ca/jfp/). These two schools won the 1998–1999 SchoolNet Site of the Year award for the best in Canadian school web sites.

Jane Willis, principal of Worsley Central School, is very pleased with this recognition. "Thank you very much for choosing our Webster to receive this honour. Our entire staff, student body and, in fact, community are quite excited about it!"

Introduced in the fall of 1999, SchoolNet's School Site Builders pilot project highlights Canada's best school-made web sites, featuring them weekly on the SchoolNet web site, along with site building tips and guidelines, so that schools can learn from each other.

The winners received a Dell PowerEdge server, and their sites are showcased on SchoolNet's School Site Builders web site at www.schoolnet.ca/builders

Teacher Appreciation

"GrassRoots is providing an exciting link between schools who normally don't work together on projects, and in many cases have not integrated the use of technology in instruction before.... I congratulate (GrassRoots) and Industry Canada on a great initiative...."

Lynda Amusch, Learning Technology Unit, Saskatchewan Education

"...This classroom application of new technologies, integrated into the curriculum and day-to-day classroom activities, fosters the acquisition of skills and knowledge that will be useful to the students in their studies and when they enter the labor market...."

Alain Dumontier, teacher at St. Marguerite d'Youville School, Ottawa, Ontario

"With GrassRoots as a foundation, teachers have a means of integrating lesson plans into the development of online projects, thus providing a very stimulating learning experience for students and teachers."

Paul Wiseman, teacher at Jane Collins Academy, Hare Bay, Newfoundland

"...This GrassRoots Project allowed us to deliver the curriculum using the latest technology.... Since the students were deeply involved in the development of the project, their sense of self-esteem grew because they felt that they were responsible for the success of this project... and they were."

Steve Skultety, computer resource teacher at Cecil Rhodes School, Winnipeg, Manitoba

"We have to broaden our horizons to capture and sustain the next wave of teachers and I think that this is exactly what the GrassRoots Program is doing."

Anna-Clare Guest, teacher at Topsail Elementary School, Topsail, Newfoundland

◆ Canadian Heroes ◆ Our Pathways to Pride

by Neil Kelly

In 1980, a young athlete loses a leg to cancer but doesn't contemplate defeat. He runs a "Marathon of Hope" across 4,000 km of Canada's landscape. Cancer invades anew before he can finish his run, but his legend will endure forever. His name: Terry Fox.

In 1992, the first Canadian woman in space completes a successful mission. She is named an Officer of the Order of Canada that same year. Already dozens of scholarships, schools, fellowships and a planetarium have been named in her honour. Her name: Roberta Bondar.

During the Second World War, a Canadian aircraft is hit by enemy fire over France. One airman decides not to bail out so he can rescue a fellow crew member trapped by flames. He later dies of severe burns. His name: Pilot Officer Andrew Mynarski.

Yes, Canada does have heroes! Terry Fox, Roberta Bondar and Andrew Mynarski are just three of many Canadian men and women who, throughout our history, have gone beyond the ordinary into the realm of heroism. By their actions, their words, and their wholehearted commitment to a noble cause, they've contributed to making Canada the envy of the world for its community spirit and quality of life. The distinguished marks they've made in every field of human endeavour are the solid foundation of our national pride.

Timing is of the Essence

With an exciting new era in our history on the horizon, we've become keenly aware of the importance of people who represent the best of what Canada can offer to the world. Canadians at all levels are in the midst of a year-end review that also encompasses a decade, century and millennium all in one dizzying package. One sector in particular has made a commitment to taking stock of where Canadians stand among the greats in history. Every day this year, the media have cast a favourable spotlight on numerous inspiring role models, past and present.

The timing is impeccable. Canadians have shown of late that they



The Minister of Canadian Heritage, the Honourable Sheila Copps, launches the Path of Heroes walking tours at the Terry Fox statue in Ottawa on Canada Day 1999.

finally want to recognize their own heroes. There's been no shortage of them; what has been lacking is adequate documentation. Rather than get coverage, they got covered over — obscured by American TV, film, recordings and books, and often ignored by Canadian publishers. Our nation has produced sons and daughters who ought to be the envy of the world for their accomplishments. No longer should their life stories be penned with the invisible ink of polite humility.

The importance of telling the story of Canada has never been in dispute. What has been rethought during the past generation is the way history is taught: how to market the key players of yesterday to the nation's leaders of tomorrow. One way is to build on

renewed interest in Canada's heritage, and convey the story in a more effective fashion. First, relate the facts — that never changes. But then we have to make those facts relevant in a modern context. How did this battle, workers' strike, election upset or new legislation play a part in making Canada what it is today? In other words, students should feel encouraged to ask "Where's my story in the story of Canada?"

As educators, you assume a task of paramount importance. You help ensure that Canada's achievers — past and present — find their rightful place as heroes in the lives of young Canadians.

Eliminating "Class Distinctions"

It's no secret that Canadian history doesn't just belong in history class. Relating the story of Canada's evolution falls within the scope of every class, to one degree or another. Geography, music, literature, economics, sports, health, social sciences, languages — all can undertake a part in making the Canadian epic educational and fun. Moreover, when teachers seize the tools that kids love to use, they reach an attentive audience and have a more lasting impact.

One such instrument was launched in 1996 by the Department of Canadian Heritage. It was the multimedia kit entitled *With Flying Colours*. Teachers were welcomed to use the kit to promote pride in

Canadian symbols, institutions and collective values. It was an immediate success, and led the federal government to believe there was a tremendous need and desire for similar made-in-Canada instructional aids.

In this spirit, Canadian Heritage followed up with a cross-country survey of teachers' views on educational materials about Canada.

Conducted in all regions of the country last year, the survey revealed that most teachers were able to find few instructional tools focused on outstanding Canadians. The vast majority said they'd like to access material about Canadian heroes/role models and would willingly integrate it into their curricula.

Access to such information would open up many opportunities for a new sense of awareness among our youth. Today's students are seasoned media consumers. What they watch and listen to may not always be to our taste, but the avenues they pursue for entertainment and enlightenment are at a level of sophistication that schools must continue to match. Out with the flipcharts and in with SchoolNet. Hide the 8mm projector and bring in the VCR. Let's adapt McLuhan to our times and say that multimedia are the message.

One remarkably convenient medium is now available to the nation's educators. As with *With Flying Colours*, it has been designed by Canadian Heritage, in keeping with its mission to promote Canadian identity and cultural values. This virtual tool set is linked to a Canada Day announcement by the Minister of Canadian Heritage, the Honourable Sheila Copps.

Last July 1, our heroes were front and centre in celebrations across the land, and nowhere more than on Parliament Hill. Here, amidst all the patriotic festivities, the Minister unveiled the Path of Heroes. This is a popular series of eight walking tours through the National Capital, that commemorate men and women from all across Canada who shaped this land and our destiny. Their contributions to nation-building are marked in a variety of ways; these include statues, memorials, archival collections, videos/film, special gardens and historical buildings to name but a few.

As an ensemble, they help to add much-deserved lustre to the story of Canada and its people. And the story doesn't come to an end with the close of the tourist season. The educational aspect of the Paths passes to your hands. It's a postscript to summertime activities.

But it's far from simply being an afterthought.

"Web of Intrigue"

The Path of Heroes has paved the way for a thematic web site. It's an electronic instrument all teachers may use when their daily lessons touch upon great Canadians and their awe-inspiring stories. By typing <http://www.heroes.ca> on the Internet, you'll turn the front page of your own passport to adventure — an intriguing

narrative told through the lives of men and women of all ages and walks of life, from every province, territory, cultural group and era — including today.

With a quick click, you can zoom in on as many or as few names as you desire, and use the multimedia portraits of great Canadians as you see fit. You can print out instructional material exactly as presented on screen, or adapt the content side-by-side with your students. Some of the content has actually been suggested by students, as the Path of Heroes guidebook invited all interested Canadians to send in ideas about their own favourite heroes, national or local. (The gallery of great Canadians is always growing,

and even the most famous of our homegrown heroes is also someone's hometown hero as well.)

Be your site visit brief or extended, you'll have no shortage of ways to use the on-line biographical material. It covers a wide panorama of topics and time frames, ensuring easy integration into different curricula across the country. Every period in our history is covered under themes such as Canada's Pathfinders, Across Space and Time, the Heroic Heart, and Canada and the World. All material is slanted towards the human face of history and the miracle of collective accomplishment that Confederation truly represents.

Lasting Legacies

Accounts of heroism and excellence are timeless, and can even be used to mark special calendar days during the school year. Why not add a personal touch to March 21, the International Day for the Elimination of Racial Discrimination, by profiling one of Canada's great human rights advocates? You could have your class do a presentation on the Fathers of Confederation as a prelude to summer celebrations of Canada Day. Ask them to write their own news report about Wayne Gretzky's final game, a day in Terry Fox's run, or Julie Payette's space flight. Maybe add a novel twist to Remembrance Day, and assemble media profiles of our peacekeeping forces over the years. Bearing in mind that larger-than-life people aren't necessarily



The fun is in the discovery on the Path of Heroes! These Canadians are about to visit the Canadian Museum of Civilization. Behind them is Parliament Hill that sits high above the Ottawa River.

national celebrities, your class could nominate a community hero. It would be someone the kids look up to and hope to be like some day — a soccer coach, veteran, park supervisor, local music radio host, or a graduate of the school who's "made it big" but not lost touch with the old neighbourhood.

You'll also find more suggestions on the back of the poster insert included with this issue of *TEACH Magazine*. It pays tribute to Canadian role models in greater detail, and can help you and your students create more original ideas for your course "Homegrown Heroes 101."

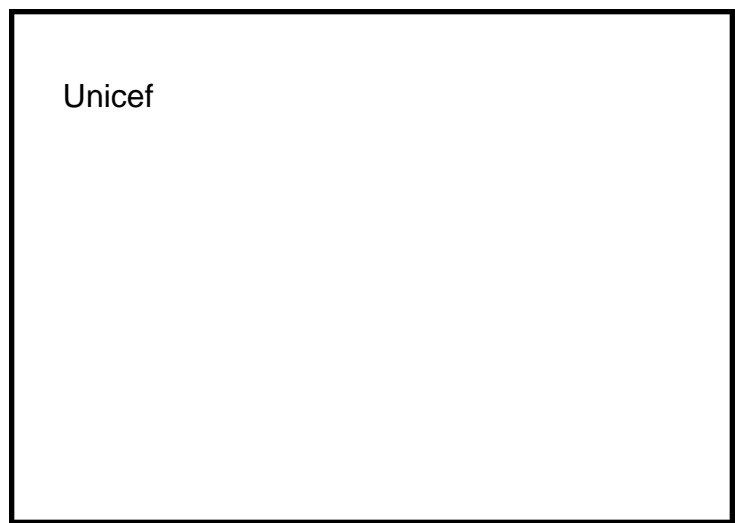
The best features of the web site are ease of access and ease of reference. Just click and pick, and windows of opportunity open up for both teacher and student alike — from early grades right through to senior secondary. Together you'll be able to weave the threads of Canada's epic saga into an enjoyable learning experience. Your Web site journey will see our heroes take centre page in the lexicon of Canadiana.

The web site will also encourage you and your students to share your views on heroes and heroism with the Minister, who has expressed a strong desire for Canadians to take ownership of the Path. The fun is not only in discovering your heroes. It's also in the sharing of the stories and the pride that they evoke.

This trip along the Path of Heroes is an exercise in living heritage. It discovers the joys and benefits of being Canadian, as well as the duties and challenges. And what makes it exciting is the knowledge that, in the years to come, you'll make your own discovery: the heroes of tomorrow are in your classrooms today.



Neil Kelly is a freelance writer based in Ottawa.



Unicef

SchoolNet's Year 2000 Education Initiative

Thinking about teaching your students about the Millennium Bug this fall?

Check out SchoolNet's innovative and interesting lesson plans

(www.schoolnet.ca)!

You'll also find media reports on this worldwide problem and information on how to make it relevant to kids in Canadian classrooms.

Sometimes being a show-off is a good thing.

SchoolNet School Site Builders encourages schools across Canada to be show-offs... to show off their websites that is!

By submitting your school's web site address to our yearly School Site Builders competition, your school has a chance to win a SchoolNet Site of the Week, Month, or even a coveted SchoolNet Site of the Year Award. Prizes include great software and products provided by sponsors such as Microsoft, Corel, the Learning Company, and Design Graphics.

Even if you don't win an award, School Site Builders will give you some great tips and ideas on making your school's web site a more effective way to tell your community and the world about the great people and projects in your school.

For further information, and to enter your school's web site into the competition, visit <http://www.schoolnet.ca/builders>



Participation ad

See what's new at Network to Savings



SchoolNet's Network to Savings (NTS) has a new interactive site to go along with its great prices on hardware, software, books and services.

NTS brings together more than 70 information technology and software companies, educational publishers, schools and libraries to make it easier and less costly for schools to access the technology that prepares students for bright futures. Look for products from Software Spectrum, Education International, Millennium Communications, DNA Media, Eduverse, Almerco International Inc, Cemis Inc, and many other leading firms.

See what's new at Network to Savings (<http://www.schoolnet.ca/savings>). You'll probably find just what you need to broaden the learning experience in your classroom.

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If you want more information about the companies and products listed below please Fax, Mail, Call or Email us at: Quadrant Educational Media Services Inc., 258 Wallace Ave., Ste. 206, Toronto, On
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GrassRoots Communities

Win prizes and national recognition!

The GrassRoots Communities@ca competition returns for a second year! Participation is fun and rewarding... celebrate what makes your community special through a web site you and your students build together. You could win prizes for your school and national recognition for your community.

Don't miss out! Join the thousands of teachers and students already involved in building this unique and valuable Canadian resource.

Register today at <http://www.communities.ca> and while you're there, take some time to travel to the more than 100 communities currently showcased.

Through initiatives like GrassRoots Communities@ca, Industry Canada's helping Canadians to innovate, connect and prosper in the new millennium.



Important memo to teachers

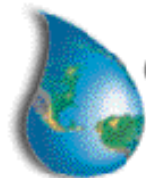
Here's another reason to participate in Industry Canada's SchoolNet GrassRoots Program, a program that fosters the creation of interactive online classroom projects.

The SchoolNet Grassroots Program and Microsoft are proud to offer free Microsoft software, such as *Front Page 2000* or *Encarta reference Suite 99*, to all classes upon approval of their SchoolNet GrassRoots Program project proposals.

For more information about getting your free Microsoft software, check out the GrassRoots Program web site at <http://www.schoolnet.ca/grassroots>

Act now. Quantities are limited!

P.S. While you're visiting the GrassRoots web site, take a minute to check out other joint GrassRoots-Microsoft promotions coming this fall. Your school could win recognition and fantastic prizes as site of the Week, Month or Year!



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