

Community History in the Canadian Rockies: Students Combine Stories and Technology to Map Their Town

Contributed by Laura Silver

It started beneath the earth, 175 million years ago. The Pacific tectonic plate inched under the North American plate. Land masses collided and enormous slabs of rock were forced upwards—the Rocky Mountains. Backdrop, destination, and testament to the area’s rich geological and social history, the snow-capped peaks surround the town of Banff in Alberta, Canada, and occupy a central spot in its past—and present.

A Town, A Park, A Landscape

Situated entirely within the borders of Banff National Park, the town is home to nearly 9,000 locals and welcomes three million visitors each year—not to mention the wolves, elk, and bears that live in the park and occasionally wander into town.

But it wasn’t always like that. According to the town of Banff, the first human settlement in the area dates to approximately 11,500 B.C., at nearby Lake Minnewanka. By 1750 A.D., mountain passes in the area provided fertile hunting and fishing grounds for Cree, Kootenay, and Plains Blackfoot tribes. The European presence in the area started 100 years after that, when representatives of the Canadian Pacific Railway Company descended on the Bow Valley to lay tracks that would connect British Columbia with the country’s other provinces. The town’s name comes from Banffshire, Scotland, the birthplace of two of the original directors of the Canadian Pacific Railway. But cars had a presence too. In 1911, the Banff-Calgary Coach Road made it possible for automobiles to access the mountain hamlet.

Today, Japanese restaurants, souvenir shops, and bars punctuate Banff Avenue. The town is also home to a dozen art galleries and several museums. The Buffalo Nations Museum chronicles the resilience and traditions of native peoples in the area. The Whyte Museum of the Canadian Rockies highlights the natural and human history of the area and features modern-day representations of Rocky Mountain life in the arts.

Walking down the tourist-dominated main drag—rugged, towering Cascade Mountain on one end, the formal Cascade Gardens on the other—it’s easy to forget that people actually live here. But a group of students is helping to change that.

Charting the Past

Two seventh-grade classes at Banff Community High School used global positioning systems, mobile phones, and multimedia tools to tell personal stories rooted in the town’s past as part of an interactive walking tour of their town. Along the way, they deepened their knowledge of their hometown, honed their voices, and harnessed technology to share the stories of people who came before them. The Banff Mobile History Tour chronicles the mountain town’s beginnings through audio and video presentations, originally designed to be activated at hot spots (GPS-triggered coordinates) in town, and now available via an interactive, Web-based map with audio and video at www.banffmobilehistory.ca (click on “History Map”).

The tour, which debuted in spring 2008, presents moments in time that shaped the town’s history.

Students’ recorded voices introduce tour-goers to native populations, explorers, and longtime residents.

The seventh graders started by pinpointing spots of interest in Banff, the highest town in Canada (elevation 4,537 feet). Then they researched related events in the town’s history and dug up historic images to illustrate the stories they chose. Students wrote and rewrote (and rewrote) scripts, which they recorded and paired with the archival images they found, presented in hard copy during the on-site tour, and now available on the Web.

The nonlinear tour showcases natural and cultural attractions within the two and a half square miles of the town of Banff. Student commentaries touch on the early days of the town library, the impressions of one of the first tourists to Banff National Park in 1905 (she married her guide), and the back-breaking work of a Canadian Pacific Railway worker (“The only thing I really wanted at the end of the day was sleep.”).

The origins of the settlement of the area are reflected in a reenactment of a conversation between explorers Duncan McGillivray and David Thompson, who, in 1800, were the first white men to visit the Bow Valley.

The students started with facts, but didn’t shy away from humor. The portrayal of railroad workers’ discovery of the hot springs outside Banff in 1885 provided an opportunity to insert some modern-day yucks.

A: “It’s not very deep, but, man, it sure is hot.”

B: “Let’s get a move on, I haven’t bathed in a week.”

C: “So that’s what that smell is.”

B: “That’s not me, it’s the sulphur.”

Tools of the Future

Bringing history to life is a group effort. Luckily, the students had a large supporting cast for the creation of The Banff (Magical) Mobile History Tour. The project was a collaboration between the local high school, a government-sponsored arts initiative called Learning Through the Arts, and the Banff New Media Institute at the Banff Centre. The project was funded by Inukshuk Wireless, a partnership between Bell Canada and Rogers Communications, designed to build and manage a wireless broadband network throughout Canada.

Angus Leech of the Banff New Media Institute, part of the Banff Centre, says the idea to involve students in creating a tour sprang from a training session for educators. One instructor, social studies teacher Irv Semenov of Banff, said he

wanted to add some pizzazz to a standard part of the seventh-grade curriculum. Each year, Semenok assigned reports on local history and each year, his students uncovered little-known details of their town's past, but each year, the bulk of their work ended up in a file drawer. Semenok wanted to create an online archive of the students' work.

Leech told him that the Banff New Media Institute could take the project a step further by using GPS, audio, and video. As senior researcher at the institute's Advanced Research Technology (ART) Mobile Lab, Leech leads teams who study and create location-based art, technology, and media design. His lab conducts research on new technologies, leads trainings for diverse audiences, and develops software for use on mobile devices such as iPhones and BlackBerries. One of its goals is to explore interactions between people, media, and the out-of-doors.

Before coming to the ART Lab, Leech spent a few years as a low-tech interpreter at Dinosaur Provincial Park in southern Alberta, where he examined the relationship between text, place, and performance.

"My job was to do guided hikes—heavily scripted—to bone beds where hundreds of dinosaurs died at once," he said, "and to lead bus tours and do live theater where we dressed up as animals and dinosaurs and did stupid dances."

Technological Alliances

Leech didn't ask students to do any fancy footwork, but he was excited about the prospect of involving a younger generation in the Mobile Lab's work. But even with first-hand experience in the field, the Calgary native knew that the Banff New Media Institute couldn't go it alone. "We needed to team up with an organization that had a rigorous curriculum-development experience," said Leech.

The institute already had a relationship with the New Media Program of Learning Through The Arts (LTTA) at the Royal Conservatory in Toronto, which works with schools throughout Canada to bring teaching artists into classrooms to enhance the curriculum using dance, music, painting, and for the last few years, media arts. Its new media manager John Scully has been involved in designing and delivering training sessions for educators at the Banff Centre for the last four years, with positive results. He noticed that teachers were excited about seeing how locative media could be used in the classroom. So, the notion of sharing the technology directly with students wasn't that far-fetched.

"It just kind of bubbled in our brain for six months," said Leech, "until we noticed there was this funding opportunity out there."

The project partners applied to Inukshuk Wireless for a grant in the area of mobile media and secured more than \$100,000 for the pilot program—the first time a mobile technology project had been funded.

Do the Locomotion

Locative media is an evolving field that uses technology—most often some form of a global-positioning system (GPS)—to help augment an experience of place. And in the case of this project, it provided instructors with an opportunity to learn about a new medium for learning as well. One of Scully's goals was to engage teachers in new software—Apple's GarageBand for audio recording and editing and iMovie for video editing—already available on Macintosh computers at the school.

"We wanted to enable the teachers who are working with the Banff community school to work with the tools that are in their environment," said Scully.

To facilitate the process, he used some of the funding to hire Calgary filmmaker James Reckseidler to help students with the technical and artistic aspects of the project.

"He wasn't just a media artist," said Scully, "He actually had quite a passion and an interest in the history."

Reckseidler, who spent four years as a historical interpreter at Fort Calgary, said the technology gave students the chance to add another layer to the scenic and historical backdrop.

"The technology was actually only a device," said Reckseidler. "We had wonderful landscape to work with already. What was surprising was how much more the stories came to life when you provided a bit more information about them."

Scully said the multimedia aspect can add a sense of immediacy.

"You're able to bring another sound, another voice, another picture right into their hands," he said. "Plus, there's real power in having someone speak in their own voice."

Where there is technology, there are technical glitches. Many students complained about complications with software, the frustration of losing work on computers, or the challenge of writing for the ear rather than the page. But Scully had a strategy to combat those challenges: "Let's go back and revise your script," he told students when the equipment did not work as expected. "Let's go back and work on drama, develop presentation skills."

Banff National Park is a UNESCO World Heritage site that attracts nearly four million visitors a year. Few of them get to hear a teenager's interpretation of the site. The Banff Mobile History Tour was presented to parents at a special reception and was open to the public during a single rain-soaked weekend in May 2008. The turnout was dampened by the weather, but students had other opportunities to share their work. School classes from the neighboring town of Canmore and from an Aboriginal school in southern Alberta also participated in the tour as audience members.

"They thought it was really cool to walk around in Banff and hear these stories told by other students their age," said Angus Leech. His mobile lab developed the Bluetooth receivers that allowed the phones to communicate with GPS receivers. The receivers kicked into action at locations that students had tagged.

Not every locative media project has access to the same set-up. Learning Through The Arts's latest locative-media project—based at a school in Calgary—uses Mediascape, Hewlett-Packard software that disseminates place-based audio and video stories on hand-held GPS-enabled devices.

Scully is optimistic about advances in the field of GPS—originally invented for military use—and looks forward to seeing what artists will do with the technology. “The more we get comfortable with this, the more we can do it on an ongoing basis,” he said.

Leech of the Mobile Lab agreed that technology helps pave the way for opportunities that might not otherwise be available to students.

“A story is so much more powerful, has so much more resonance if you tell it in the place where it happened,” said Leech. “There’s a lot of potential in that, in terms of learning.”

For More Information

The Banff (Magical) Mobile History Tour. www.banffmobilehistory.ca

The Banff New Media Institute. www.banffcentre.ca/BNMI

Learning Through the Arts. www.lta.ca

Banff National Park.

www.pc.gc.ca/pn-np/ab/banff/index_E.asp

James Reckseidler.

<http://james.reckseidler.com/>

Hewlett-Packard’s Mediascapes. www.hpl.hp.com/mediascapes

Savannah, an educational adventure game that uses hand-held devices. www.futurelab.org.uk/projects/savannah

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