

# CLEVER CREATIONS

Since before there was a Canada, people have been coming up with smart ways to help those with disabilities get around, communicate and do everyday things more easily.

Roland Galarneau was born with just a tiny bit of vision. He learned Braille at a school for the blind in Montreal. Back home in Hull, Que., he took night classes while working as a janitor. In 1952 he invented a microscope that let him read printed words for the first time. Inspired by the success of his “roloscope,” Galarneau started on another project in 1966. After thousands of hours, he came up with the Converto-Braille. It changed letters as you typed into raised Braille symbols that blind people could read. His invention led to modern computer Braille software.



## HELPER CARDS

Nadia Hamilton’s brother Troy is autistic. When they were growing up, she drew him pictures to help him with everyday things. Those pictures are now MagnusCards, an app from her Toronto company. The step-by-step digital “cards” guide users through things from brushing their teeth to ordering food in a restaurant.

## ROLLING FREEDOM

Watching his aunt push a chair across the kitchen floor for balance, Norman Rolston thought there had to be a better way. So in 1986 he came up with what he called the Able Walker — a frame whose four legs had wheels on the bottom that swivelled and hand brakes to stop the walker from rolling away. His invention was a big improvement over existing walkers. It gave new freedom to people who just needed a bit of support to walk. Rolston, who was born in Saskatchewan and lived in Alberta, the Northwest Territories and B.C. over his lifetime, could have made piles of money from his invention. But he shared his plans for free, a generous act that earned him an award from the International Society of Inventors.



## RAMPING UP

In 2002, Luke Anderson was mountain biking in British Columbia. He tried to jump a huge gap but crashed and ended up with a spinal cord injury. His new life in a wheelchair soon showed him how many buildings had steps that made it impossible for him to get in. He realized there wasn't much he could do about a huge set of steps, but a single step might be something he could fix. The result was the StopGap. It's a brightly coloured wooden ramp with rope handles. When someone who uses a wheelchair or walker faces a single step at the door to a building, someone from inside can bring out the StopGap. Businesses, schools and other buildings all over the world use ramps from his Toronto charity StopGap Foundation to welcome anyone who needs a bit of help.

## UNIQUE SIGNS

Indigenous sign languages have a lot to tell us about who belongs and how we include people with disabilities. The bonus?

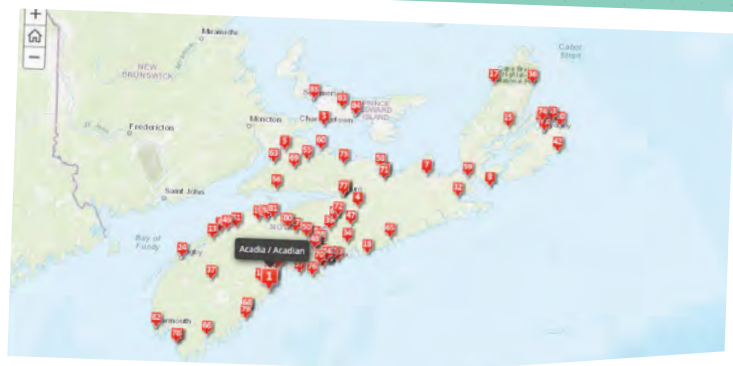
These distinctive sign languages didn't just help deaf and hearing people to communicate. They also made it possible for people to talk (with their hands) when they met others who didn't have the same spoken language. (Think of an Ojibwe person who speaks Anishinaabemowin and a Scottish person who speaks Gaelic still being able to trade because they both sign.) **Plains Sign Language** was once widely used from what is now Saskatchewan through to Mexico. People who could hear used it as they told stories. People who couldn't hear used it to communicate. And everyone could use it for trade. Many different First Nations in what is now central and southern B.C. used **Plateau Sign Language**. It was eventually replaced by the prairie version and **Chinook Jargon**, a spoken language that mixed Indigenous and English words. Like many other Indigenous peoples, Inuit don't see deafness as a problem. **Inuit Sign Language** (ISL) grew out of the hand signals people used out on the land to hunt and gather in what is now Nunavut. Hearing people and those who are deaf use ISL, although fewer kids know it now that they often go south to schools where they learn American Sign Language or Langue des signes québécoise.



## HERE'S HOW TO SPELL THE NAME OF THIS MAGAZINE IN AMERICAN SIGN LANGUAGE.



**Most Deaf communities across Canada use American Sign Language or Langue des signes québécoise. In eastern Canada, Maritime Sign Language was used for more than a century and still remains in use even today by people living in Newfoundland and Labrador, New Brunswick, Nova Scotia and Prince Edward Island.**



The Atlantic Provinces Sign Language Place Names Map shows the names of communities all over Atlantic Canada in ASL and MSL. A team from Saint Mary's University in Halifax worked with members of the local Deaf community, who sign the names in the map's video. The signers (like Betty MacDonal, above) come from Nova Scotia, New Brunswick and Newfoundland and Labrador. You can find the map at [smu.ca/apslpn](http://smu.ca/apslpn).