

## Western schools

## FIRST NATIONS

## Schools rise to needs of Aboriginal population

Schools across Canada's western provinces are rising to address one of our nation's biggest challenges and potentially one of its greatest opportunities – the education of Canadian Aboriginals.

Don Drummond, chief economist TD Bank Financial Group, is among the thought leaders calling attention to the issue. "The shortfalls on employment and income for the Aboriginal communities compared to the non-Aboriginal population are huge among people without high school education; at the other end of the education spectrum, there is almost no gap for the population with a post-secondary degree," he says.

Aboriginal students are more successful in secondary education today than they've ever been before, says Alison Pickrell, associate vice-president of Student Affairs, Saskatchewan Institute of Applied Science and Technology. "There have been significant gains; however, there are still difficulties that Aboriginal students face. We've recently undergone an eight-month study to identify those barriers, and we are putting additional strategies in place for success."

About 18.5 per cent of SIAST students are Aboriginal, and 92 per cent of Aboriginal students surveyed say they would recommend SIAST to other Aboriginal students, she says. "Our research has confirmed we're on the right track, but we're working on continued improvement with initiatives addressing barriers such as housing, childcare and access to science and math prerequisites. The key is creating a safe and welcoming learning environment for Aboriginal learners."

Some of the suggestions



The Saskatchewan Institute of Applied Sciences and Technology is helping boost the capacity of Aboriginals in multiple ways. As urban Aboriginal leadership co-ordinator with the City of Saskatoon, SIAST alumni Warren Isbister's (top left) responsibilities include developing a summer leadership camp for on-reserve teens. SIAST nursing student Lisa Francis (right) is among the bright young people who contribute to SIAST's reputation for having the highest Aboriginal enrolment of any Canadian nursing school. Carpentry apprentice and Aboriginal student Charlie Sanderson (left) celebrates the ground-breaking of SIAST's first student housing project, a 36-unit, family housing complex being built at SIAST's Prince Albert campus. PHOTOS: TOM BARTLETT/SIAST

received during the study included increasing the number of Aboriginal faculty and staff, integrating culturally relevant content into courses so that students have an opportunity to see themselves in mainstream curriculum, and increasing cross-cultural awareness.

"We have a holistic perspective. For example, we've tried to integrate the idea of the medicine wheel, used as a symbol by many Aboriginal

people throughout the world, into our approach. It addresses the four aspects of humanness: emotional, physical, mental and spiritual. If you're looking at successful transitions for Aboriginal students and successful support environments, those four aspects of humanness are inseparable," says Ms. Pickrell.

SIAST is also exploring early identification strategies for some of the risk factors that

may impair a student's ability to succeed. "Fifteen per cent of the students we surveyed indicated to us that they speak an Aboriginal language as their first language; in post-secondary education settings, quite often, they're struggling with the course vocabulary or terminology. An example of a strategy we might put in place for those students, then, would be to ensure we review course-related vocabulary before a

student begins the class, so he or she isn't struggling in the classroom to try to translate material while trying to learn it as well."

For many Aboriginal people, says Joanne Stone-Campbell (ly'imelwit), coordinator of Aboriginal Services at the British Columbia Institute of Technology, "It's a big transition from their community to a city."

Many students decide to

go home at some point because the urban learning environment is too foreign, she says, but even the temporary gathering place Aboriginal Services at BCIT now provides serves as an important antidote. "I tell them, 'I'm like your auntie or sister away from home; your family. My door is open; come visit, have coffee, share a story.'"

With the help of a provincial government grant that the BCIT Foundation hopes to match through donations, the creation of an Aboriginal Gathering Place will provide a safe and accommodating setting for students to ask questions, develop urban life skills, and find support from people who have similar experiences.

"Often Aboriginal learners lack confidence," says Ms. Stone-Campbell. "Some people don't have role models – I was the first person in my community to graduate from high school. We're often one or two generations from a residential school, so we may be ostracized in our communities when we leave to go school."

With the help of a community of people sharing similar experiences, she says, "We can face this and tell our families that we're going to learn to better the whole – not just for ourselves, but for our families and communities."

"We should encourage and applaud schools that are providing effective education and training for Aboriginals," says Mr. Drummond. "This will be key for advancing their economic and social interests. It will also be key for more effectively matching the available labour supply from Aboriginal communities with the shortage of skilled workers that will likely re-emerge once the economy recovers." ■

## CLIMATE CHANGE

## Academics launch unique approaches to climate challenges

The climate is changing, and with it, our future. In two western universities, two very different initiatives are aimed at ensuring that we're prepared.

"We need to adjust to the impacts of climate change as well as reduce our emissions," says Deborah Harford, executive director of the Adaptation to Climate Change Team (ACT) at Simon Fraser University. "The concentration of fossil fuels in the atmosphere already guarantees warming for quite a number of years; China is now the world's largest global emitter and it isn't going to slow down any time soon."

In order to respond to that reality, she says, "We need to reduce our emissions and show other nations how that can be done – but also plan for the inevitable effects of warming, which span everything from health risks such as the spread of tropical diseases, to impacts of extreme weather and increased storms, to problems with our crop and water supplies.

"It's about increasing resilience and learning how to think about everything in new ways."

By bringing together the world's leading experts in all of the realms that will be affected by climate change, ACT serves as a catalyst for informed policy creation, research and implementation recommendations.

It is becoming clear, says Ms. Harford, that emissions reduction and adaptation challenges can be addressed at the same time with the right planning.

"Clever adaptation can result in many economic and environmental benefits. Unfortunately, even at the federal level, adaption and mitigation are treated as a separate issue. There is a disjoint, which may cost us a lot of

time and money."

She says ACT is the only university organization in Canada addressing the policy aspects of this problem. "When we began, one of our pre-eminent scientists said, 'This is so badly needed; there is so much great research being done, but we need policy and communication expertise to ensure it's applied.'"

At Thompson River University, student Jody Marten is working to mitigate climate change through efficient home design.

The winner of CMHC's Equilibrium House Design Competition, Ms. Marten's "net zero" home design will be used to build the Canadian Home Builders Association 2010 Training House at Sun Rivers Golf Resort Community in Kamloops. (Net zero homes produce at least as much energy as they use.)

The Architectural and Engineering Technology Diploma program that Ms. Marten is

enrolled in exposes students to architecture and engineering principles, providing a well-rounded education in various design disciplines, says program instructor Dale Parkes. As a result of their training and participation in the competition, he says, "We have 38 students who could now design a high-quality, highly sustainable building. And the trade students at the university will be building this project: We're fostering that knowledge in the hope that we'll have people to build these sustainable homes as well."

"The house can be seen as a prototype. People might not copy everything, but perhaps (they'll adopt) certain pieces of it," she says, noting that design considerations such as orienting a home so the majority of its windows face south face, allowing the capture of winter sunlight while providing shade during the summer sun, "don't cost a lot, but can make a dramatic difference." ■

## ACT inspires more than action on climate change

Deborah Harford, executive director of the Adaptation to Climate Change Team (ACT) at Simon Fraser University, was inspired to create the organization partly by her participation in the inaugural cohort of the Semester in Dialogue at SFU.

"In that semester, I got to connect with my passion for the environment," she says. "I'm not a scientist, but it gave me an opportunity to look at how (climate change) is being managed – at the issues scientists and community leaders were struggling with."

It was very empowering, she says. "Suddenly, although I was still a student, I was in a position of peer-to-peer equality with highly respected and qualified decision-makers. I realized that all of these important people are ordinary people who followed a passion, and I could be one of them."

"Now, I look around me at the people I work with, and I frequently try to get that message across: all you need is conviction and the right kind of information and you can make a difference. You can affect the future if have the courage of your convictions."

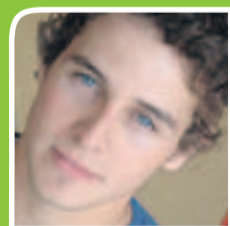
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