Building Harmony in Learning: STAO 2006

by Michael J. Passow Earth Sciences Correspondent

Each November, the Science Teachers Association of Ontario/L'Association des Professeurs de Science de L'Ontario (STAO) stages one of the finest regional professional development conference on this continent. Held at the Doubletree International Hotel near Toronto's airport, STAO offers three days of featured talks, workshops by and for teachers, exhibits, banquets, and much more that is of value not only to Canadian teachers, but also the few of us who trek north each fall for this opportunity to expand our understanding of what it takes to educate a child.

STAO is one of the oldest professional science education organizations, founded in 1890 (five years before the Science Teachers Association of New York State). I've had the pleasure of attending their meetings most of the past five years, and have always returned home loaded with handouts, posters, and great ideas to try with my students and colleagues. Attending this meeting reminds me that there is much, much more to teaching science than NLRB and state exams!

The diversity of topics included in this year's STAO meeting can be gleaned from a sampling of the featured speakers. They included Vicki Cobb, author of more than eighty-five entertaining nonfiction books for children; Bette Ann Bridges, an outstanding classroom chemistry teacher; Shane Green, lead for social impact programs for the Ontario Genomics Institute; Bob McDonald, host of CBC Radio's "Quirks & Quarks"; John Smol, director of the Royal Society of Canada's Life Sciences Division; and Lillian Eva Dyck, a member of the Gordon First Nations in Saskatchewan and advocate for women and Aboriginal in science.

STAO's programs are packed with sessions large and small. There are usually one or two featured talks and about a dozen smaller workshops presented by classroom teachers and/or university professors. Because Toronto is the largest metropolis in the very large Province of Ontario, the meeting attracts about 2,000 teachers each year, so most sessions have good numbers. Most sessions are closely tied to one or more grade level within the Ontario curriculum guides.

I had the pleasure this year of presenting a session featuring online resources available through Environment Canada's "Project Atmosphere Canada." Created in conjunction with the American Meteorological Society, these provide fourteen web-delivered modules ranging from atmospheric basics to how climate changes may affect Canadian locales and citizens. The Ontario teachers were generally pleased to find out about what they could use with their students, and since the Meteorological Service of Canada (equivalent to the US National Weather Service) has so few people available to engage in such outreach, they were pleased to support my efforts. The PAC Teacher Guides are available at

(www.smcmsc.ec.gc.ca/education/teachers_guides/index_e.html).

The Conference Exhibits booths fill two ballrooms. Many of the exhibitors are the local representatives for the American companies found at NSTA or state conferences, but others have a distinctly Canadian characteristic. These include the famous Ontario Science Centre; the less-famous, but very interesting Science North museum in Sudbury; the Canadian Space Agency; Canadian Nuclear Society; Canadian Hydrogen Association; and Great Lakes Forestry Centre of Natural Resources Canada in Sault Ste. Marie, ON. There are also many vendors with neat products, at prices that are still something of a bargain, with the US-Canadian dollar exchange rate as it is currently.

STAO provides vast amounts of on-line resources and print materials for its members and other. These include the "Virtual Library" ("La Bibliotheque Virtuelle"), filled with suggestions and recommendations for classroom uses. Their active committees have produced very useful booklets about classroom and laboratory safety guides which are available for sale. For more information, visit STAO on the web at (http://www.stao.org).