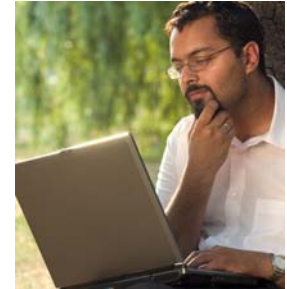


## Speed into Sustainability: Flexible learning on your patio!

by Jacques LeCavalier

As more and more communities and organizations embrace sustainability, there is a growing need for professionals with the knowledge and skills to plan and implement sustainable solutions in every sector of human activity. Happily, educational providers are stepping up to the plate with an increasing variety of flexible, innovative (and emissions-free!) alternatives for high-quality professional sustainability education. You can now access top-shelf knowledge and expertise from the likes of the University of Toronto, the World Business Council on Sustainability, The Natural Step, the International Society for Sustainability Professionals, and others — without ever leaving home!



Currently, those interested in pursuing full-time post-secondary education with a focus on sustainability have an increasing number of options. Many universities have undergraduate and graduate programs dedicated to sustainability studies, and most have at least integrated aspects of sustainability into existing engineering, business, law and other programs. A 2006 survey by *Corporate Knights Magazine* ranked UBC, York University and the University of Calgary among the Canadian schools doing the best job of this.

But what about professionals already in jobs impacted by the sustainability “wave” and all its complexities, and for whom a full-time educational leave isn’t a viable option? Well, forward-looking organizations like the Fresh Outlook Foundation provide excellent educational conferences, workshops, and this e-magazine so we mortals can get a jump on the key sustainability issues of the day. And smart institutions like Simon Fraser University are answering the call for more worker-friendly education as well — the City Program’s just-launched Certificate in Sustainable Community Development being a case in point (<http://www.sfu.ca/city/sustain.htm>). This non-credit program targets mid-career professionals with a series of intensive courses that up the ante on conventional lectures, through a greater focus on case study analysis, field trips, and team-based application of skills on real-world issues.

**“There are two fundamental equalizers in life — the Internet and education. Moving from the one-room schoolhouse to the one-world schoolhouse is now a reality.”**

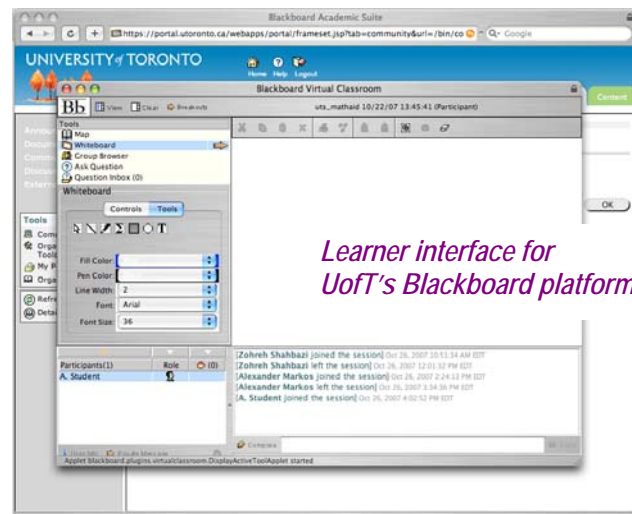
John Chambers,  
CEO, Cisco Systems

For flexible learning that truly transcends the limitations of time and space, however, one has to look to distance learning and the Internet. A rapidly growing number of organizations and institutions around the world are doing just that, and following e-learning guru Elliott Masie’s advice that “we need to bring learning to people instead of people to learning.” Here are a few notable examples.

### ENVIRONMENTAL DISTANCE EDUCATION AT THE UNIVERSITY OF TORONTO

The Centre for Environment at the University of Toronto offers a selection of online environmental and sustainability-focused courses and certificate programs designed for recent graduates or more advanced practitioners (<http://distanceed.environment.utoronto.ca/>). There is a Certificate in Environmental Management and a Certificate in Renewable Energy; individual courses include Environmental Risk Assessment and Environmental Case Management.

Courses reside on the Blackboard learning management system and distance education portal, which is home to some 1,450 courses at U of T, for more than 24,000 online students. Like most online learning platforms in use in colleges and



*Learner interface for  
UofT's Blackboard platform*

universities (WebCT being another popular platform), U of T's Blackboard portal allows students to take courses at a distance, but these courses are still led by an instructor, and students are generally required to complete the courses — and required assignments and projects — within a pre-set timeline. However, communication tools such as discussion fora and blogs build in some flexibility, allowing students to collaborate when their schedules permit. Real-time meetings or webinars are also supported, thanks to the portal's "virtual classroom" environment.

### WBCSD AND THE NATURAL STEP MAKE A SPLASH WITH SELF-PACED E-LEARNING

In contrast to the instructor-led distance education approach preferred by most universities, the World Business Council on Sustainable Development and the Natural Step have achieved success with an even more flexible online learning approach. Each of these well-known international NGOs has made waves with its own version of completely self-paced, interactive learning programs on sustainability delivered to practitioners' computers on demand. Individuals having completed these programs now number in the hundreds of thousands.



*Interaction from 'Sustainability: Step by Natural Step' e-learning course*

WBCSD's offering, called Chronos, provides an introduction to the business case for sustainable development in about three hours (<http://www.sdchronos.org/en/index.htm>). It has now been used by more than 200 organizations around the world, has been customized by clients including Rio Tinto and Shell, and is available in several languages. The Natural Step, for its part, has produced full and condensed versions of e-learning courses providing an overview of sustainability and the Natural Step framework, with both corporate and local government audiences in mind (<http://www.naturalstep.ca/elearning>). The growing list of clients using this award-winning learning includes the Alberta Urban Municipalities Association, the Atlantic Canada Sustainability Initiative, Bell Aliant, the Cooperators, the District of North Vancouver and many others. Like Chronos, the course is available in several languages and features a variety of learning strategies like games, scenario-based exercises and case simulations.

High-quality "self-paced e-learning" programs like this are an easy sell because of their 24/7 access, virtually limitless scalability, and ease of use as a "pre-learning" tool for organizations or communities needing to get everyone to a common level of basic competency and understanding early on in the sustainability journey. Bart Robinson, Program Associate with the Bow Valley Sustainability Hub and key player in the City of Canmore's sustainability efforts, puts it this way: "Among other benefits, the Natural Step e-learning course made it possible to move into the application of the TNS Framework much sooner than would have been possible otherwise."

### A EUROPEAN TRAINING EFFORT TARGETS SUSTAINABILITY CHANGE AGENTS

A new and unique distance-learning course for professionals within the European chemical industry, launched in the fall of 2007, takes an innovative, "blended" approach to online education for sustainability. Developed by Sweden's Blekinge Institute of Technology, in collaboration with The Natural Step, Hydro Polymers, and Rohm and Hass, the course takes participants on an eight-month learning journey to become sustainability change agents within their respective companies. The course's first 25 participants represent 14 chemical companies in six different countries.



The course, entitled 'Leading change for a sustainable

chemical industry', is an exciting model because it incorporates all modes of online learning, as well as weekend face-to-face workshops, in a way that extracts the biggest learning impact from each. Participants learn basic concepts on their own with directed readings and interactive e-learning tools, interact virtually with experts in live webinars, carry out team project work using various online communication tools, and come together periodically for on-site sharing of project results and additional interaction with experts, instructors, and peers.

Hydro Polymers manager Paul Wheatley is "...delighted that within a relatively short timeframe, we have succeeded in engaging a major part of our supply chain to address sustainability challenges together. This course can only accelerate our progress towards sustainability and will strengthen our industry as a whole."

These initiatives stand out as examples of some of the key strategies for flexible learning about sustainability, but there are others:

- Blekinge Institute of Technology in Sweden launched three new (tuition-free!) distance education courses this year: Introduction to Sustainable Engineering, Introduction to Sustainability with Social Science Applications, and Introduction to Strategic Sustainable Development (<http://www.bth.se/site/sustainability.nsf/pages/sustainability-distance-learning>).
- ICLEI's (International Council for Local Environmental Initiatives) Web Learning Centre (<http://www.iclei-europe.org/index.php?id=755>) has been offering a variety of distance education and self-paced e-learning courses since 2002 to build the know-how of local government leaders in sustainability, worldwide.
- Earth Council Geneva offers a series of sustainability-related online courses on its e-learning portal (<http://earthcouncil.com/ecgsite/content/view/5/5/>). Courses typically last from four to five weeks, requiring learners to invest 15-30 hours of effort in online exercises, quizzes and games, and by interacting with other learners and online instructors. Climate change is a particular focus, with courses on Organizational GHG Accounting, Emissions Trading, and other topics.
- The International Society for Sustainability Professionals (<http://sustainabilityprofessionals.org/>), a new professional association created by Associates of Portland's Zero Waste Alliance, is already providing educational services such as a webinar series to its members, an online certification program for the SCORE sustainability assessment method, and has plans to develop and deploy its first distance learning course in late 2008.

#### IN CLOSING...

Over time, opportunities for technology-enabled distance education about sustainability will continue to grow in number and variety. Already, work is under way on initiatives that involve immersive online environments such as Second Life, as well as multi-player online games. Imagine that — deep learning about sustainability, and without the emissions! Clearly, Ray Smith — former chairman of Bell Atlantic — was right: "This new economy is based more on brains than brawn — and moves more on broadband byways than concrete highways."

*Jacques LeCavalier is a sustainability education and e-learning specialist based in Kelowna. He is also an Associate of The Natural Step Canada. He's home a lot and can be reached at 250-764-1166 or [jlecavalier@naturalstep.ca](mailto:jlecavalier@naturalstep.ca).*