



minerva

UPDATE

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BUSINESS SCHOOL WORKSHOP A SUCCESS

Academics as well as industry, government and association representatives participated in a Minerva Workshop for business schools at Queen's University in 2001. Called *Employee Safety & Health – A Key Element of Good Business*, the Workshop – co-presented by Queen's Business School – provided a forum to discuss the health and safety management knowledge required by business graduates, who represent the future leaders of business and industry. Participants also identified the best methods for students to develop the necessary skills and mindset to manage workplace health and safety effectively.

In addition to the human toll, occupational accidents, injuries and illnesses cost Canadian business an estimated \$24 billion annually. "There's a growing recognition that , if we want to make a giant leap towards eliminating workplace injuries and deaths, then we have to start when people are young, because they will be the future business owners, managers, professionals and leaders," Sante Mauti, then Assistant Deputy Minister of the Ontario Ministry of Labour, said in his keynote address. "That is why the work of Minerva is so vitally important."

Linking safety to corporate strategy

The Workshop used a planning methodology called the Future State Visioning Process, adapted from the work of Dr. Jim Stewart, a Minerva Canada Committee member, to identify the gap between the current and desired state of health and safety knowledge of graduates and to discuss bridging strategies. Roy Mould, VP, Prevention, for the Workplace Safety & Insurance Board in Ontario, reinforced the importance of this in a presentation that stressed graduates will see more of a focus on the business of health and safety in the future and therefore must understand the intrinsic nature of health and safety to work.

Among the other highlights were industry and academic presentations from DuPont Canada, Saturn, Queen's University and Université Laval, all representing good models of health and safety integration.

"I found the workshop extremely valuable," says Spring Tompkins, a Professor in the School of Business at St. Lawrence College. "It demonstrated the importance of linking health and safety objectives with corporate strategic directions in order to imbed those types of values into the philosophy of an organization. This impacts each department and their responsibility for meeting health and safety objectives."

The conclusions and recommendations of the Workshop are intended to provide a roadmap for Canadian business schools, industry and government in moving forward the goal of integrating health and safety education into the business curriculum. For a full report, visit www.minervacanada.org to view the Proceedings or contact Beulah Burtles at 416.506.0488, ext. 240 or e-mail bburtles@iapa.on.ca.

Minerva Canada gratefully acknowledges the support of the Workshop sponsors – DuPont Canada Inc., Imperial Oil Ltd., General Motors of Canada Ltd. and the Workplace Safety & Insurance Board. Other supporters included the Industrial Accident Prevention Association, the Ontario Ministry of Labour, the Canadian Centre for Occupational Health and Safety, and Human Resources Development Canada.

PRESIDENT'S MESSAGE

It hardly seems possible that over a year has gone by since the previous *Minerva Update* but now is the time to reflect on the progress made during 2001 and to look forward to the exciting challenges of 2002.

This newsletter will provide you with details of the significant achievements of the past year, but I want to focus on the success of our Business Workshop, held on a beautiful Spring day at Queen's University, Kingston, Ontario (see story opposite).

We had an outstanding roster of speakers from governmental bodies, academia and industry, who provided attendees with some thought-provoking information leading to lively break-out sessions where the current state of health and safety management teaching in Canadian business schools was discussed and suggestions made for future directions in this field.

I believe that everyone came away from the Workshop with the conviction that there is a valuable role for Minerva Canada to play in promoting new initiatives and providing academia with the resources to do the job. And I want to extend a debt of gratitude to our Workshop sponsors listed on this page. To access the Proceedings from the event, see page 4.

As 2001 was the International Year of the Volunteer, it would be appropriate for me to close my remarks by thanking all those individuals across Canada who take every opportunity to promote Minerva Canada and to give so generously of their time and ability to foster its aims.

Alistair Macewan/President

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ACADEMIC CORNER

Laval and Ryerson in forefront

This issue features the initiatives of two post-secondary institutions in integrating health and safety management concepts into business curricula.

- **Université Laval:** Laval's business school is in the forefront with a Research and Education Group that provides training in occupational health and safety management to undergraduate and graduate students and that has successfully attracted industry funding for academic research. Among the contributors to the \$.5 million fund are Hydro-Québec, HRD Canada, AON and DuPont. The newest contribution is from Alcan (\$250,000 over five years). A Chair in Occupational Health & Safety Management was created in February 2000, followed by an MBA program in September 2000. The Chair is composed of seven professors from different departments and six full-time professional researchers. The MBA program - the first of its kind in Canada - covers business courses, safety management and safety decisions. It is offered in French only, and many of its courses are Internet based. On the research side, there are three themes: safety management in small companies; new forms of work and their impact on safety; and new avenues in safety management R&D. The establishment of the Chair and the industry funding available for research have attracted the attention and interest of business faculty. Big research projects have included safety management at construction sites and social marketing and prevention.

For more information on the Laval program and Chair, contact Jean-Pierre Brun, Program Director, Chair in Occupational Health & Safety Management, at jean-pierre.brun@mng.ulaval.ca or 418.656.2405.

- **Ryerson University:** All of the case studies generated by Minerva Canada (see page 4) are being used in several courses in the business school and beyond. Over 500 undergraduates per year enrolled in the Basic Operations Management course are introduced to health and safety management through the Storey Energy case study. Risk management and health and safety are major operational issues stressed in the Advanced Operations Management course (with approximately 200 students per year); the Automotive Plastics case study is a fixture in this course and is used to introduce students to the issue of safety as a loss in a corporation and as an excellent opportunity to stage a turnaround. The Storey Energy and National Rubber cases are also used as assignments in the Consulting to Management course and in the Occupational Health and Safety Management Systems course in the Occupational Health and Safety Program. In addition, over 100 mechanical engineering students in fourth year Engineering Design are exposed to the need to manage health and safety through the Cover Shield Failure case study. *For more information on Ryerson's initiatives, contact Dave Meston, Professor, at dmeston@ryerson.ca or 416.979.5000, ext. 6726.*

Secondary school curriculum integrates health & safety lessons

Most Canadian provinces and territories now include health and safety teachings in their high school curriculum in one form or another. Through in-class activities, informational videos and CD-ROMs, industry speakers and the internet, today's students are being exposed to important lessons regarding health and safety best practices. Some highlights:

Ontario

- Since September 1999, health and safety have been part of the new Ontario grade 9 curriculum and will be expanded through to grade 12

by the 2002-03 school year. This new four-year secondary school curriculum includes mandatory health and safety-specific learning expectations imbedded in eight course streams, covering dozens of courses, including Arts, Business, Food and Nutrition, Construction, Technology, Science and Dance. The government has produced comprehensive resource manuals for teachers to use in the classroom to help teach the requisite health and safety lessons and has provided in-service training for school representatives. Ford Canada, the Canadian Auto Workers and the Workplace Safety and Insurance Board have sponsored the printing of this material. The visibility of industry and labour as partners with government and schools is an important signal about the need to work together to advance the health and safety of youth.

British Columbia

- The Worker's Compensation Board runs "Student WorkSafe", a program consisting of resources and a series of lesson plans aimed at instilling strong safety attitudes in students. Older students getting ready for the work force are required to have eight hours of health and safety training as part of the school's Career and Personal Planning curriculum.

Northwest Territories & Nunavut

- A CD-ROM called "Safety and the Young Worker", produced in conjunction with the Canadian Centre for Occupational Health and Safety, has been introduced in the grade 9 curriculum.

New Brunswick

- The Workplace Health & Safety Compensation Commission has developed a school resource called "Choices for Life" containing health and safety activities that support mandatory curriculum outcomes. Several provincial Departments of Education list the "Choices for Life" program as a support resource that can be used within various school subjects.

Although health and safety education has not been mandated as part of official high school curriculum, schools and teachers in most jurisdictions have recognized the importance of these lessons and have been integrating the resources made available to them. It is Minerva Canada's hope that this trend will spur more interest in health & safety at the post-secondary level.

NEW RESOURCE

Under Development: A CD-ROM resource for business schools on health and safety management that will include a review of literature and resources that can be incorporated into curricula. This is a joint research project involving professors at Queen's University, the University of Toronto and St. Mary's. The first stage is completed and a list of article titles appropriate for business schools should be available soon. Info: Julian Barling, Associate Dean, School of Business, Queen's, at 613.533.2477 or e-mail jbarling@business.queensu.ca



Ryerson student Cindy Lew (*middle right*) is the recipient of the first post-secondary health and safety scholarship to be awarded in Canada. Maureen Shaw (*middle left*), President and CEO of the Industrial Accident Prevention Association, presented the Jim McLellan Occupational Health & Safety Award – a tribute to the life of the Past Minerva Canada President and a health and safety advocate – to Lew in February. On hand for the presentation were Brian Jones (*far left*), Professor in the School of Occupational and Public Health degree program in which Lew is enrolled, and Tim McLellan (*far right*), who represented his family. "I am very honoured and proud to be the first recipient of an award of this kind," said Lew, who came into the program with a degree in Kinesiology from the University of Waterloo. "It feels great that there are people who aim to help students in the occupational health and safety field." Lew spent last summer working at the Ontario Workplace Safety and Insurance Board where she developed the College and University Student Health and Safety Awareness Program. She looks forward to working in the vanguard of prevention when she graduates this spring.

Established in 1999, the award recognizes a Ryerson student who has taken a course in occupational health and safety in the Business or Engineering Schools or is enrolled in the OH&S degree program and who has demonstrated a deep commitment to health and safety. "This is the only scholarship available that provides young people like Cindy with the opportunity to make a significant contribution to workplace health and safety," said Shaw.

Contributions to the Jim McLellan Occupational Health and Safety Award should be made to the same and sent to Carol Scrase, Manager, Student Financial Assistance, Ryerson University, 350 Victoria St., Toronto, ON M5B 2K3.

RECOMMENDED READING

Managing for World Class Safety (Wiley-Interscience, 2002), written by Minerva Committee member Jim Stewart – a safety management consultant and former executive with DuPont – provides quantitative facts for evaluating safety management and the quality of safety practices in organizations, based on research that polled 700 people in 10 companies.



REGIONAL REPORT

• *Minerva Manitoba*

Minerva Manitoba has received \$75,000 in funding from the Workers' Compensation Board's Community Initiatives and Research Program that will be allocated in \$25,000 increments annually to 2004. Minerva representative Barry Warrack reports that work has begun with the Engineering faculty at the University of Manitoba. To date, 13 modules of safety information including PowerPoint presentations and teaching materials have been drafted, and are in the process of being revised and finalized. It is expected that this work with Engineering will continue in the summer, with the development of 10-12 focused teaching vignettes on safety related issues that can be directly inserted into a variety of engineering course lectures in the fall. A Web site will also be developed to aid in disseminating this information to interested parties both within Manitoba and across Canada.

Discussions are underway with the Faculty of Agriculture, University of Manitoba, which has agreed to devote several lectures to safety and health matters this fall. Curriculum development work will be undertaken in the summer to meet this need. Talks have also begun with Brandon University to discuss some options for expanding safety and health information.

Contact Barry Warrack at bwarrack@gov.mb.ca for more information.

• *Minerva Quebec*

Quebec employers had their first contact with Minerva Canada recently. Isabelle Lessard, the Quebec representative for Minerva, gave a presentation on the vision, mission and activities of Minerva in February to a group of 50 employers and consultants. The audience was composed of members of the Comité Inter Entreprises du Montréal Métropolitain, a not-for-profit association which brings together employers from the Montreal area. The conference delivered by the Centre patronal de santé et sécurité du travail sparked great interest and those wishing to work on the creation of a Minerva group in Quebec were invited to contact the Centre patronal. This is a first step towards developing a Minerva committee in Quebec, and work will begin in the next few months with the interested partners.

Contact Isabelle Lessard at i.lessard@centrepatronalsst.qc.ca for more information.

WELCOME ON BOARD

Tony Pasteris, Senior Operations Integrity Advisor, Environment & Safety Department, Imperial Oil Ltd., was elected to Minerva Canada's National Board at the Annual General Meeting on December 3, 2001. He will serve for a three-year term. "As Imperial Oil's representative, I'm pleased to have been appointed to Minerva's Board and to assist the organization in achieving its goals," says Tony. "I firmly believe that engineering and business school graduates should have a fundamental understanding of the principles of safety, health and environment management before entering the workplace. Minerva Canada seeks to develop this understanding."

For a complete list of Board members, see page 4.

RESOURCES

Proceedings

- **New.** Integrating Safety Management into the Curricula of Canadian Business Schools – Proceedings of the Employee Safety & Health – A Key Element of Good Business Workshop, Queen's University, May 2001
- Integrating Safety Management into the Curricula of Canadian Engineering Schools – Proceedings of the Safety by Design Engineering School Workshop, University of Toronto, November 1998
- Integrating Occupational Health & Safety into the Curricula of Canadian Business Schools – Proceedings of The Project Minerva Workshop/Symposium, Queen's University, September 1993

Case Studies

Prepared by Business or Engineering School faculty and available in English and French.

1. **New.** **Public Utility Mechanical Parts Failure**

(available in English only; French translation in production)

This case study focuses on design issues and maintenance strategies used in an aging plant. Based on a potentially serious incident, it illustrates both life cycle design oversights as well as more subtle maintenance risk management decisions made over time that contributed to the incident. The lessons learned in this case are valuable and universal for engineering and operations managers, as these are the types of routine risk management decisions that are made daily across industry.

2. **Automotive Plastics** - Strategically, the new manager of this manufacturing plant started with highly visible safety fixes that set the stage for improved employee relations and quality, leading to a "worst-to-first" turnaround of plant performance in less than one year without a need for significant capital spending.
3. **Storey Energy** - A serious accident to a competitor of an oil and gas pipeline contractor has caused the owner to reflect on the lessons learned. He has always paid close personal attention to safety and is quite proud of an accident-free record. As the business grows, he realizes there is a need for a more formal management systems approach to guarantee future success.
4. **The National Rubber Company of Canada** - A manufacturing plant was experiencing rising costs because of problems with outdated management systems and processes, employee relations, health and safety, quality and delivery. Another challenge for the new manager was a multicultural work force. Strategically, safety was used as a "language" common to all employees and became a symbolic indicator of the company's overall turnaround to profitability.

Copies of 2001 Proceedings and all case studies can be downloaded free from our Web site at www.minervacanada.org. Or contact: Beulah Burtles at 416.506.0488 ext. 240 or e-mail: bburtles@iapa.on.ca

Web Site

- Visit www.minervacanada.org



Minerva Canada is a not-for-profit corporation
to promote excellence in the teaching of safety management.

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