



NATIONAL ROUND TABLE ON THE ENVIRONMENT AND THE ECONOMY
TABLE RONDE NATIONALE SUR L'ENVIRONNEMENT ET L'ÉCONOMIE

NRTEE Official Reports Copyright and Reproduction Notice

All **NRTEE Official Reports** (“Works”), provided on this USB memory key and identified in the **NRTEE Official Reports List** folder, contain their individual copyright and reproduction notice. The notice in each of these Works is replaced and superseded by the following copyright and reproduction notice, effective February 22, 2013:

© This Work is protected by copyright and made available for personal or public non-commercial use and may be reproduced, in part or in whole, and by any means, and may be further distributed for non-commercial use, without charge or further permission. All users are required to indicate that the reproduction, whether in part or in whole, is a copy of a Work of the National Round Table on the Environment and the Economy (NRTEE). Reproduction, in whole or in part, of this Work for the purpose of commercial redistribution is strictly prohibited. Furthermore, no right to modify or alter in any manner the Work is hereby granted.

Consultant Reports Copyright and Reproduction Notice

All **Consultant Reports** (“Works”), provided on this USB memory key and identified in the **Consultant Reports List** folder, were prepared for, or commissioned by, the National Round Table on the Environment and the Economy (“NRTEE”) in support of its research efforts, and may or may not reflect the views of the NRTEE. Such Works may not contain a copyright notice as they were not intended for public release when they were so prepared or commissioned. In the absence of a copyright notice, and where a copyright notice may in fact appear, the following notice shall be read together with the Work and, where applicable, replace and supersede any existing copyright notice, effective February 22, 2013:

© This Work is protected by copyright and made available for personal or public non-commercial use and may be reproduced, in part or in whole, and by any means, and may be further distributed for non-commercial use, without charge or further permission. All users are required to indicate that the reproduction, in part or in whole, is a copy of a Work of the National Round Table on the Environment and the Economy (NRTEE). Reproduction, in whole or in part, of this Work for the purpose of commercial redistribution is strictly prohibited. Furthermore, no right to modify or alter in any manner the Work is hereby granted.

Ed1

NRT-1996016
Jane Dougan
Education

Bridging Business and Sustainable Development Education at Centres of Higher Learning

Contract No. Z0050-6-1018

June 1996

Prepared for
The National Round Table on Environment and Economy (NRTEE)
Education Committee

by
Jane Dougan

401
NRT-1996016

Table of Contents

Introduction	1
Identifying the “Key Players” for NRTEE Partnership	
Canadian Federation of Business School Deans Secretariat	6
Dalhousie University	8
New Academy of Business (UK)	16
Royal Roads University	22
Saint Mary’s University	24
University of Calgary	27
University of Manitoba	30
York University	33
Conclusions and Recommendations	38
Bibliography	43
Appendices	44
1. Deans and faculty interested in maintaining contact with NRTEE Education Committee.	
2. Sustainable development MBA courses - existing and planned.	
3. Canadian Federation of Business School Deans Member Institutions.	
4. Relevant Internet sites and discussion groups.	

Introduction

This report is the outcome of a contract with the National Round Table on Environment and Economy (NRTEE) Committee on Education (Contract No. Z0050-6-1018). It builds on material collected in a previous scoping survey of Canadian business schools that are incorporating sustainable development education at the MBA level (Contract. No. Z0050-5-1218). The material for both reports was collected from a range of sources, including visits to universities and schools, personal interviews, literature searches, keyword exploration of the world wide web, and E-mail discussion within relevant groups.

The mandate of the NRTEE Committee on Education is “to develop, facilitate and deliver programs and materials to encourage awareness of environment economy interactions and round table processes in a variety of learning settings”.¹

The terms of reference for this report were:

1. To follow-up with interested business schools in Canada to survey sustainable development issues and options for partnerships.
2. To explore relevant international examples for applicability to Canada.
3. To provide advice to the Education Committee on programs and information to assist in the integration of business and sustainable development education.

The emphasis was to identify the “key players” for follow-up with the NRTEE Committee on Education, and to provide suggestions to the Committee as to the next steps they might take to support the integration of sustainable development principles into business education in Canada.

Identifying “key players” is unavoidably a somewhat subjective task, particularly when the criteria for selection are linked to such a widely-used but also widely-disagreed-upon phrase as “sustainable development”. (This was also identified as a hurdle in the way of clear communication of interests and enquiries for the first part of the survey.)

“Sustainable development” as a term describes both a process and an objective that can be understood in a number of different ways, if at all.² For example, in the responses to my investigations with business schools over the past few months, sustainable development was used more-or-less interchangeably with terms such as “sustainable economic development”, “environmental management”, and “greening the curriculum”. But do these mean the same thing?

It was my experience in conducting this enquiry that these terms were often used interchangeably as more-or-less synonymous, but in fact described quite different approaches, processes and objectives with regard to the type and intent of the education being offered.

The reader will probably be relieved to learn that I have no intention of entering into a long discussion of the ‘true’ meaning of “sustainable development”! There does, however, seem to be some general agreement about what sustainable development education incorporates (Coleman, pers. comm.; Gladwin et al., 1995; McLaren, 1995; Roome, 1995; Shrivasta, 1994).

Accordingly, in identifying what I considered to be “key players” in bringing about an integration of sustainable development and business education, I looked for business education that at some level understood “sustainable development” as incorporating notions and principles such as:

- ▶ a responsibility to strive to achieve human development in terms of fulfilment of basic human needs.

- ▶ an acceptance of ecological, social and economic interdependence.
- ▶ a concern for equity, in the sense of fair distribution of resources both within and between generations, as well as some level of recognition of interspecies responsibility or impact.
- ▶ the need for prudence and humility, and a recognition that ecological and social systems are complex and often unpredictable.

The above incorporates recognition of a need for an examination of environmental values and ethics, environmental literacy, a holistic perspective, and interdisciplinary analysis.

In short, the people and organizations identified as “key players” were those that seemed to be looking beyond “business as usual” with some environmental add-ons to a search for a new paradigm in the way in which business interacts with the social and environmental spheres, and its inherent responsibilities.

Nigel Roome (1995) has identified the different learning approaches and methods that a focus on sustainable development education in business incorporates:

“OLD” MBA

Concentration on specialization
Case studies
Short-term horizons
Universal management prescriptions
Economic explanations for firms
Environment accommodates to business

“NEW” MBA FOR SUSTAINABILITY

Multidimensional, Interdisciplinary
Role playing, Experiential learning
Long-term vision for change
Creative experimentation and adaptive learning
Firms seen as part of social, economic and environmental systems
Business evolves in environmental and social setting.

Nevertheless, a few caveats need to be kept in mind. All of these institutions and the people involved are pioneers in what is a new field of human enquiry and endeavour. Inherent in the concept of “sustainable development” is the notion that there is no one ‘right’ homogeneous prescription or path for the world to follow; the approaches and achievements of various institutions by necessity will be specific to their particular place and culture.

It is only twenty-five years since the Stockholm Conference on the Human Environment, and the beginnings of any widespread recognition of the need for corporate environmental management. The phrase “sustainable development” was popularized by the Brundtland Commission only in the latter half of the 1980's. Like any new and far-reaching concept, it is (quite appropriately) still undergoing a process of evaluation and debate.

It must also be recognized as a given that there is an unavoidably inherent and underlying tension to the necessity for these types of enquiries. While the World Scientists’ Warning to Humanity (1993) cautions that “Human beings and the natural world are on a collision course. ... Fundamental changes are urgent if we are to avoid the collision our present course will bring about”, the reality is that “things move glacially in academia” (Sharma, pers. comm.) and, despite the much-heralded New World Order, the business community’s priorities are constrained by short-term time-frames and widespread recession, together with political and social unrest.

Finally, despite best attempts, this report cannot claim to be totally comprehensive in its coverage. Responses to enquiries were not received from all institutions or academics.

From my experience and enquiries over the past few months, and based upon what I have identified as an understanding of “sustainable development”, these are key institutions and individuals that I have identified as offering new pathways to achieving an understanding of sustainable development in business education.

Such an objective is far from academic - it is critical, and it is intensely challenging. I would like to thank the NRTEE most sincerely for giving me the opportunity to investigate what has been such an interesting, vital and engaging enquiry.

Jane Dougan, M.Sc.
The University of Guelph
Guelph, Ontario
N1G 2W1

Identifying the “Key Players” for NRTEE Partnership

Canadian Federation of Business School Deans Secretariat

Address: 116 Albert Street, Suite 1005
Ottawa, Ontario
K1P 5G3

Key contacts: Karen Fleming
Director of Operations

Dean Wallace Crowston
National Project Coordinator
(Dean, Faculty of Management, University of McGill
tel: 514 398-4001)

Telephone: (613) 564-5059/ 564-3301

Fax: (613) 564-7695

E-mail: fleming@profs.admin.uottawa.ca

Description: The Canadian Federation of Business School Deans (CFBSD) is the professional association for Deans and Directors of Faculties of Business and management in Canada. The CFBSD is dedicated to working with its members towards achieving excellence in business education.

Comments: Karen Fleming has been very helpful with regard to providing information and suggestions for contacts.

The CFBSD will be meeting at the University of Toronto for a professional development conference from 4.00 p.m. December 2nd to the end of the day on December 3rd. I have broached with Karen the possibility of the NRTEE Education Committee meeting with the CFBSD earlier in the day on December 2nd.

The NRTEE's interests with regard to sustainable development and business education would not be likely to conflict with the planned agenda for the CFBSD meeting. The theme for their conference is "Are Business Schools Preparing Students for the New Economy?". This will focus on learning about the retail and financial sector, rather than on business schools and learning for sustainable development.

Dalhousie University

Address: 1236 Henry Street
Halifax, Nova Scotia
B3H 3J5

Key contacts: Dr. R.E. Klapstein, Director,
School of Business Administration

Don Patton, School of Business Administration.

Professor R. Cote, Director
Resource and Environmental Studies

Telephone: Business Administration (902) 494-1816
Resource and Environmental Studies (902) 494-3632

Fax: Resource and Environmental Studies (902) 494-3728

E-mail: Dr. R.E. Klapstein - klapstein@earth.sba.dal.ca
Prof. R. Cote - rcote@ac.dal.ca

Programme(s) offered: Since 1979, the School for Resource and Environmental Studies (SRES) has been a unit within the Faculty of Management (along with Business Administration, Library and Information Services, and Public Administration).

A new course will be launched in January 1997 that has been designed by Professor Cote (Resource and Environmental Studies) and Don Patton (School of Business). "Environmental Management Systems for Business" will be a core course in the MBA program.

This course will be based upon a joint MEB/BELL University Community Partnership project undertaken by Professor Cote, "The Industrial Park as an Ecosystem". Further details can be found in the enclosed Spring 1996 edition of "Envirolink" (Vol. 5., No. 1., p. 4).

Comments:

The two year Master of Environmental Science program offered by SRES offers several core courses in environmental studies, but it is not clear how much core overlap there is between the SRES students and faculty, and those in Business Administration.

Dalhousie was the only Canadian representative in the original consortium of 25 business schools formed by the Management Institute for Environment and Business (MEB).

While a laudable and important first step in bringing together environmental necessities and business interests, the "Industrial Park as an Ecosystem" project and the course resulting from it encompass some of the debates outlined in the 'Introduction' with regard to the notion of sustainable development.

The project is concerned with the operation of businesses both individually and as a system within an industrial park. On the level of an environmental management enquiry, it appears that the project is going to be successful in reducing energy and waste, with resultant benefits to the surrounding environment. In reducing economic costs, it presumably extends the period of time in which manufacture can take place. In essence, it achieves a more efficient (and likely more cost-effective) way to do business as usual.

On closer examination, however, it provides an interesting example of what sustainable development business education might become.

The prominent use of the word “ecosystem” is quite different from the generally understood ecological definition. There is no apparent consideration of both abiotic and biotic components. It would be interesting, for example, to clarify ecological and sustainability-related considerations such as:

- an evaluation of the present and potential sustainability of the ecosystem where the industrial park is situated.
- consideration of the sustainability of the previously existing ecosystem and the impact of development of the industrial site on flora and fauna, as well as the sustainability of surrounding human communities.
- the social and environmental impact of manufacturing methods and wastes on (i) the surrounding ecosystem and human community, (ii) at the end point of the manufactured products.
- the sustainability and necessity of the product(s) being manufactured.
- the sustainability of transportation linkages involved with the site and the manufacture of the goods.
- the impact of the workers employed in the businesses in the industrial park (for example, food consumption, sewage).

This example of business education and the potential for sustainable development particularly caught my imagination as an example of what sustainable development education in an economic context might become.

This may be somewhat of an aside, but I was recently fortunate enough to be part of the Canadian Cohort 3 of the partially-NRTEE-funded LEAD (Leadership for Environment and Development) programme. As a LEAD participant, I particularly remember a visit to an industrial park outside of Chaing Mei in northern Thailand, and the social, environmental and economic debates that arose from that visit. This industrial park was a new venture, bringing together a number of European and American manufacturers, mostly of jewellery and other small-component products. It hired mostly younger people, particularly women from the rural communities who had the required manual dexterity. The industrial park itself had been built upon former agricultural land and displaced local communities and farmers that had been sustaining themselves on the site for generations. The costs of doing business in northern Thailand at this site had to take into account the death of 10% of workers per annum. There was disagreement as to whether this was due to AIDS or to illness caused by water and soil contamination from wastes associated with the industries. Most of the foreign managers of the companies lived within a fenced enclave on the site and had little apparent interaction with the local community or culture. Nevertheless, the existence of the site had a major impact on the local community's culture and sustainability.

There was little to distinguish this industrial site in design or method from other sites I had seen in Korea or Taiwan. There was nothing to suggest that it had been designed in accordance with the sustainability requirements of the surrounding community or ecosystem. Its existence was entirely dependent upon the economic bottom line, and presumably owed no long-term allegiance to its location beyond the profits of the various shareholders.

Part of the intent of the Dalhousie Project is to assess its feasibility for application in industrial sites in developing countries. As described, I wondered whether the project would have prevented or alleviated many of the critical, underlying sustainability dilemmas and questions that had arisen in the Chaing Mei experience, and are being played out all across the developing world.

Management Institute for Environment and Business (USA)

Address: 1101 17th St., NW, Suite 502
Washington, DC 20036
U.S.A.

Key contacts: Matthew Arnold, President of MEB
Robert Day

Telephone: (202) 833 6556

Fax: (202) 833 6228

E-mail: mebbell@aol.com

Programme(s) offered: University-Community Partnership for Environmental Quality.

Business-Environment Learning and Leadership (BELL) Programme and associated Annual BELL Conference.

Description: The Management Institute for Environment and Business (MEB) has been a catalyst for promoting environmental education in business schools in the US. It was founded to empower business people to contribute to environmental progress, primarily by providing them with the skills to integrate environmental considerations into management decisions. Field-based work is seen as increasingly important. The MEB is a key component of initiatives to integrate business education and sustainable development for several reasons.

- The MEB fosters a program dedicated towards **University-Community Partnership for Environmental Quality**. These partnerships encompass a wide range of initiatives, depending on the needs of the particular community and university. According to MEB promotional material, they are “excellent opportunities for business school professors and students to work with their local communities and businesses to improve environmental quality, promote **sustainable economic development**, and improve equity”. (The Spring 1996 issue highlights an Environmental Management/MBA program at Dalhousie University, which was developed with assistance from the MEB/BELL team).
- It publishes a seasonal newsletter for educators called “**EnviroLink**”. (It is noteworthy - and perhaps indicative of recognition of changing paradigms - that this newsletter's by-line has been altered between 1994 and 1996. In 1994, it was “for educators in the field of environmental management”. In 1996, this was changed to “educators in the field of business and the environment”.)
- In 1993, MEB launched the **Business-Environment Learning and Leadership (BELL) Programme**. It was founded on a consortium of 25 business schools, with Dalhousie University the only Canadian representative. These 25 schools agreed to work in partnership with MEB and each other to:
 - i. Identify and fill gaps in curricula materials.
 - ii. Develop models to integrate the environment throughout the core MBA curriculum.
 - iii. Seek ways to actively engage their students and institutions in university-community partnerships to help solve local environmental problems.

The intellectual framework of BELL centres around 4 key themes or tracks: sustainability, competitiveness, conservation partnerships and management best practices. The **Sustainability** track is most relevant to NRTEE enquiries. It “explores the ecological and social elements of sustainable development” (EnviroLink, Vol.3(3)/BELL 1994). These are listed as including “energy conservation, sustainable agriculture, natural resource management, population, environmental justice, community development, urban site reclamation, human empowerment, education and job creation”.

- York University's Erivan K. Haub Programme in Business and the Environment York University will host the third annual **BELL conference** in Toronto from July 18-20. This year's theme is "Environmental Excellence as Business Strategy". This Conference will bring together a wide range of business educators and business professionals to discuss innovative business and environment curriculum approaches, as well as how to integrate environmental, health and safety concerns into management and strategy. A resource room of business and environmental education materials will also be a much-visited site.
- On October 1st 1996, the MEB and the **World Resources Institute (WRI)** will merge to become partner organizations.

The WRI is a world-renowned centre for environment and development policy research and technical assistance. By merging with WRI, MEB and the BELL programmes will be able to "launch new educational initiatives that capitalize on the natural synergy between the two organizations" (Envirolink, Vol. 5(1), Spring 1996).

New Academy of Business (UK)

Address: Office 1, 3-4 Albion Place
Galena Road
London W6 0LT, England.

(In Continental Europe)
Parkham 51
3941 RD Doorn
The Netherlands

Key contacts: Gil Coleman, Program Director
David Murphy, Researcher
Malcolm McIntosh
Anita Roddick (founder)

Marcello Palazzi (Europe)

Telephone: Gil Coleman: Bristol 0117 924 5449
David Murphy: Bristol 0117 974 4750
Malcolm McIntosh: Bath 01225 33 0017
New Academy's office: London 0181 563 8780

Marcello Palazzi (Europe): 31 05313 2441

Fax: Malcolm McIntosh: 01225 330017
New Academy's office: London 0171 208 7697

Marcello Palazzi (Europe): 31 3430 20030

E-mail: Gil Coleman: 100774.3227@compuserve.com
David Murphy: D.F. Murphy@bristol.ac.uk
Malcolm McIntosh: 101460.1421@compuserve.com

Marcello Palazzi (Europe):
100414.1526@compuserver.com

Programme(s) offered:	A variety of program formats including stand-alone modules on MBA programmes.
Description:	The New Academy of Business was founded in 1995 as the brainchild of Anita Roddick, Chief Executive and Founder of the Body Shop. It envisages “new horizons for business and business education” with business as the most powerful force for change in this age of free markets and the global economy. It recognizes that a new type of business education is required, one founded upon “the firm intent to guide business toward the service of humankind”. Sustainable development (in the sense of “contributing to sustainable economic development, social well-being and environmental regeneration”) is a stated target of its vision and programs.

These are early days for the New Academy. It is described in conversation with its Program Director (Gil Coleman) and Researcher (David Murphy) as a “virtual organization” and “an experiment”, built around the belief that a new paradigm is emerging in industrial society. The New Academy’s agenda is to see business as an integral part of this progress by offering management education from a new perspective, and to concentrate on the development of socially and ecologically responsible business practices.

It has already developed a range of short courses (i.e. Best Practices of Socially Responsible Business; Eco-management Strategies for the Future; Social and Ethical Accounting and Auditing) which will be run in Britain, Europe and the USA. It also delivers stand-alone modules on MBA programmes.

The New Academy envisages, for example:

- **Tailor-made programmes** for companies run at their own locations or at the New Academy’s facilities.
- An **Innovation Network** to bring together companies with a commitment to social responsibility.
- The development of its own **postgraduate degree**.

- Accredited degree courses contributing to undergraduate and postgraduate curricula, delivered by the New Academy at a variety of locations worldwide.
- The development of a New Academy Centre which will include a think-tank and meeting place location for business leaders, library, accommodation, and multimedia facilities.
- A worldwide Educational Consortium of companies, learning institutions, public and non-government organisations that participate in programme production and delivery.

Key components:

Delivery length:

Full-length	Accredited degree courses
Short course	A variety of short course formats, including: <ul style="list-style-type: none">- professional education programmes for practising executives and managers.- in-company programmes

Delivery method:

Case study	Yes
Core courses or add-on	Core
Cross-institutional	Yes
Distance education	Planned
Experiential ¹	Yes
Interdisciplinary	Yes
Internet/E-mail	?
Relevant literature	Yes
Conferences and workshops	Yes
Seminars	Yes
In-company programs	Yes

¹ Learning based upon direct experience, such as site visit.

Key content and concepts:

Appropriate technology ²	
Environmental accounting	Yes
Environmental legislation	Yes
Environmental literacy	Yes
Environmental reporting	
Interdisciplinary	Yes
International dimension	Yes
Organizational change	Yes
Paradigm shift ³	Yes
Systems thinking	Yes
Values and ethics	Yes

Comments:

As with **Royal Roads**, the **New Academy of Business** is in its initial stages of formation. While admittedly somewhat “experimental”, potentially it offers a very flexible opportunity for creative interaction with the NRTEE. Its creative approach is reflected in some of its planned course offerings; e.g. **Spirituality in Business Life**, and **Futures and Systems Visioning**.

In meeting with Gil Coleman, David Murphy and Malcolm McIntosh, they expressed considerable interest in working with the National Round Table Committee on Education, and in finding other like-minded Canadian organizations to link with. (David Murphy is Canadian and so has a particular interest in forging Canadian linkages as well as a good understanding of the Canadian social, business and educational context).

The New Academy is presently working with organizations such as McDonalds, Shell and British Airways (the latter in development of an MBA program). A sample of the elective course developed for the University of Lancaster MBA programme is enclosed.

² For example, pollution control through technological fixes

³ For example, alternative economics; debates around limits to growth

For further information:

Please refer to the following brochures enclosed with this report:

- New Academy of Business: Education for responsible enterprise
- Best Practices of Socially Responsible Business
- Eco-management Strategies for the Future
- Social and Ethical Accounting and Auditing

- Elective for University of Lancaster full time MBA programme

Royal Roads University

Address:	2005 Sooke Road Victoria, B.C. V98 5Y2
Key contacts:	John Walsh, Acting President Stephen Grundy, Coordinator of Environmental Programs Rich Mimick, Business Programs
Telephone:	(604) 391 2511
Fax:	(604) 391 2500
E-mail:	jwalsh@royalroads.ca sgrundy@royalroads.ca rmimick@royalroads.ca
Programme(s) offered:	Undergraduate and graduate programs built around an educational philosophy recognizing that sustainable development is “the single most important issue facing the world”.
Description:	Royal Roads is Canada’s newest university, although it is founded upon a tradition of excellence. Formerly, it was the site of Royal Roads Military College. Considering that the state of the environment is increasingly recognized as fundamentally critical to our security, the military heritage of Royal Roads may be more apt to its new focus than is immediately apparent! ³

While Royal Roads does not include an MBA among its initial (1996) program offerings, (these are a B.Sc., MA and B.Com.), its innovative approach together with its stated core focus on sustainable development, together with an emphasis on partnerships with industry and a market-driven curriculum, clearly make it relevant to the present focus of the NRTEE.

It is my understanding that the Chair of the NRTEE Committee on Education, Elizabeth Crocker, met recently for an extended period with Dr. Stephen Grundy at Royal Roads. Stephen Grundy is in charge of coordinating the environmental programs.

I have had several telephone discussions with Stephen Grundy in which he has repeatedly stated his interest in working with the NRTEE on their present initiative. As he said in his letter of April 3, 1996, "... it is clear that NRTEE and Royal Roads have much to gain by establishing a close relationship. We are very interested in approaches to integrating our three university themes which are sustainability, leadership and business."

Similarly, I have had communication with Rhonda Pettyjohn at Royal Roads informing me that Dr. John Walsh, the Acting President, is interested in being kept in touch with NRTEE plans. Ms. Pettyjohn indicated that Dr. Walsh hoped to be in direct contact.

Stephen Grundy expressed enthusiasm for working with the NRTEE in our telephone conversations, and agreed to fax me further information with regard to their courses. He envisages the Royal Roads environmental program as involving three "overlapping circles" of management, leadership and science. Unfortunately, the awaited materials had not arrived by the deadline for submission of this report. However, knowing that Elizabeth Crocker has already met with Dr. Grundy to discuss common interests, I am certain that the Committee will not lack for information and ideas about potential joint initiatives.

Key components:

- integrated core focus on sustainable development that will result in the creation of new academic disciplines
- flexible, interdisciplinary and market-driven curriculum
- distance learning
- short residential courses
- experiential learning
- best use of new technologies
- built upon partnerships with industry, government and post-secondary institutions
- open to international audience

Saint Mary's University

- Address:** Frank H. Sobey Faculty of Commerce
Saint Mary's University
923 Robie Street
Halifax, Nova Scotia
B3H 3C3
- Key contacts:** Dr. Scott Carson, Dean
Tony Charles, Dept. Of Finance and Management Science
Sharma Sanjay, Asst. Professor, Marketing and Management
- Telephone:** Dr. Carson - (902) 420-5421
Tony Charles - (902) 420-5732
Sanjay Sharma - (902) 420-5752
- Fax:** Dr. Carson - (902) 420-5892
Tony Charles - (902) 420-5121
Sanjay Sharma - (902) 420-5112
- E-mail:** Dr. Carson - scarson@shark.stmarys.ca
Tony Charles - tcharles@shark.stmarys.ca
Sanjay Sharma - ssharma@shark.stmarys.ca
- Programme(s) offered:** Environmental Economics (ECO363)
Natural Resource Economics (ECO362)
Fishery Economics (ECO361)
Business and its Environment (MGT388)
Social Issues in Business (MGT688)
Strategies for Sustainable Development (new)
- Description:** Several business school courses incorporate sustainable development themes (see above list). The most notable of these at the MBA level is a team-taught course being prepared by Cathy Driscoll (who apparently was previously a staff member

with the NRTEE). This course, "Strategies for Sustainable Development", will be introduced in the fall of 1996 as part of the MBA program.

There is also an Executive MBA program offered beginning in September each year, with classes alternate Fridays and Saturdays. David Bateman is the Program Director (tel: 902 420-5638) but I received no indication that this program incorporates sustainable development considerations.

Comments:

While a relatively small university, Saint Mary's has the largest business school in Atlantic Canada. Tony Charles informed me of several programmes at Saint Mary's that relate to sustainable development and involve faculty from the business school, among others. Several of these programs are unique to the region. The latter include undergraduate programs in Environmental Studies, undergraduate and graduate programs in International Development Studies, and graduate programs in Atlantic Canada studies. These are complimented by various centres such as the Gorsebrook Research Institute for Atlantic Canada Studies, the International Centre and the Atlantic Canada Centre for Environmental Science. While it is clear that business school faculty are involved in the development and/or teaching of some of these programs, it is not known to what extent business students elect to take such courses.

The course apparently most clearly aligned with the MBA program is the one currently being developed, "Strategies for Sustainable Development". It is particularly interesting in that it will be team-taught by a cross-discipline of faculty: Cathy Driscoll, Terence Day (Director of the Environmental Studies Program), Tony Charles, John Kline (Operations Management), Peter Secord (Accounting) and a Professor from Economics. It is based on a course that Dr. Sanjay taught at the University of Calgary with Prof. Vredenburg that was "well received by students". This course will also be particularly interesting as it

Bridging Business and Sustainable Development Education at Centres of Higher Learning

will be open to students from all disciplines, including business, so there may be an interesting mix of perspectives and approaches. Both Dr. Sanjay and Dr. Charles were extremely willing to share information and anxious to be kept in touch with the NRTEE Education Committee's work in this regard.

University of Calgary

Address: 2500 University Drive N.W.
Calgary, Alberta T2N 1N4

Key contacts: Dr. Michael Maher, Dean, Faculty of Management
Dr. Harrie Vredenburg, Director
Faculty of Management
Environmental Management and Sustainable Development
Programs

Telephone: Dr. Maher (403) 220-5689
Dr. Vredenburg (403) 220-7450

Fax: Dr. Maher and
Dr. Vredenburg (403) 282-0095

E-mail: maher@mgmt.ucalgary.ca
vredenbu@acs.ucalgary.ca

Programme(s) offered: MBA in Environmental Management

Description: Three separate graduate classes were taught in the winter of 1996, with 12-15 students in each class. The MBA concentration in environmental management was just approved last spring. The Faculty are now busily promoting it and anticipate more enrolment in the autumn. A promotional brochure is enclosed.

Key components:

Delivery method:

Case study	
Core courses or add-on	Core
Cross-institutional	Yes
Distance education	
Experiential ⁴	Yes
Interdisciplinary	Yes
Internet/E-mail	
Relevant literature	Yes

Key content and concepts:

Appropriate technology ⁵	Yes
Environmental accounting	Yes
Environmental legislation	
Environmental literacy	Yes
Environmental reporting	
Interdisciplinary	Yes
International dimension	Yes
Organizational change	Yes
Paradigm shift ⁶	Yes
Systems thinking	Yes
Values and ethics	

Comments:

The University of Calgary's MBA in Environmental Management program identifies and recognizes many of the core components of sustainable development in its course descriptions and program objectives. It is attempting to be proactive rather than reactive, and going

⁴ Learning based upon direct experience, such as site visit.

⁵ For example, pollution control through technological fixes

⁶ For example, alternative economics; debates around limits to growth

beyond technological solutions to pollution problems to look at new ways of doing business. Field projects are emphasized, the course on strategies for sustainable development is identified as a core component, a number of flexible joint degree programs are offered, and special consideration of sustainable development requirements in the "Third World" are identified as a course component.

The University of Calgary is also undertaking outreach in the form of conferences. "Toward the Sustainable Corporation" was the title of a conference organized by Faculty of Management in May 1996.

For further information:

Please see the enclosed brochure "MBA in Environmental Management" and the conference brochure "Toward the Sustainable Corporation".

University of Manitoba

Address: Faculty of Management
MBA Program Office
Room 268, Drake Centre
181 Freedman Crescent
Winnipeg, Manitoba R3T 5V4

Key contact: Jerry Gray, Dean

Telephone: (204) 474-9711

Fax: (204) 261-6084

E-mail: jgray@bldgdrake.lan1.umanitoba.ca

Programme(s): Sustainable Development Module in new MBA programme.

Description: The basic objectives of the module are:

- (1) To develop sensitivity to the nature of the environmental crisis.
- (2) To provide familiarity with typical business responses to the crisis
- (3) To provide familiarity with attempts to improve firms' responses, and
- (4) To consider business responses from an ecological point of view and provide familiarity with eco-management

The Sustainable Development module is divided into 8 sessions. In order of delivery, these examine:

- (1) The nature of sustainable development,
- (2) Strategy and sustainable development,
- (3) Strategy and institutional legitimacy,
- (4) Eco-development paradigm I,
- (5) Eco-development paradigm II,

- (6) Development in environmental reporting,
- (7) Implementing corporate environmental strategies - the role of management accounting, and
- (8) Implementing corporate environmental strategies.

In Spring 1996, there were 2 different instructors. Reg Litz (tel 204 474-9406) taught sessions 1-5; Nabil Elias taught sessions 6-8.

Key components:

Delivery Length:

The module consisted of 8 sessions offered from late April to June 1996.

Full-length	part of full MBA program
Short course	could be easily adapted to this

Delivery method:

Case study	Yes
Core courses or add-on	Core
Cross-institutional	?
Distance education	No
Experiential ⁷	Not apparently
Interdisciplinary	Yes
Internet/E-mail	?
Relevant literature	Yes

Key content and concepts:

Appropriate technology ⁸	?
Environmental accounting	Yes
Environmental legislation	?
Environmental literacy	Yes
Environmental reporting	Yes
Interdisciplinary	Yes

⁷ Learning based upon direct experience, such as site visit.

⁸ For example, pollution control through technological fixes

International dimension	Yes
Organizational change	Yes
Paradigm shift ⁹	Yes
Systems thinking	Yes
Values and ethics	Yes

Comments:

This is a new module in the University of Manitoba's MBA program. I was struck by its holistic perspective and inclusion of new concepts. It was one of the few such courses that brought differing ecological and economic perspectives together in a very direct and open way. It used a multiplicity of approaches: i.e. film, case study and open discussion of recent literature. Consider, for example, this question for the class that comes up in Session 5 of Module 1:

“What do we do with [Paul] Hawken's assertion that, even if every company on the planet would adopt the environmental and social policies of the best companies, the world would still be moving toward environmental degradation and collapse?”.

For further information:

Please see the full course description details.

⁹ For example, alternative economics; debates around limits to growth

York University

Institution: York University
Faculty of Administrative Studies
Erivan K. Haub Program in Business and the Environment

Address: Schulich School of Business
4700 Keele Street
North York, Ontario M3J 1P3

Key contacts: Dezso J. Horvath, Dean of FAS (possible contact regarding proposed NRTEE meeting of business school deans)
Nigel Roome, Director, Erivan K. Haub Program
Nancy Sutherland, Coordinator, National Management Education Project for Business and the Environment

Telephone: (416) 736-2100
Nigel Roome, Ext. 30190
Nancy Sutherland, Ext. 40478

Fax: (416) 736-5762

E-mail: nroome@bus.yorku.ca
nsutherl@mail.fas.yorku.ca

Programme(s) offered:

The Erivan K. Haub Program in Business and the Environment
The National Management Education Project for Business and the Environment (please see page xx for details)

Description: According to Roome (1995), York University's Faculty of Administrative Studies offers the largest business school program in Canada.

The **Erivan K. Haub Program in Business and the Environment** was established in 1991 and instituted in December 1993 with the appointment of its first Director (Nigel Roome). Its mission is: “to advance education and research which develops the capacity of managers to contribute to the achievement of the vision of `sustainable development’”. The Program is overseen by an International Advisory Board, chaired by Maurice Strong.

The Erivan K. Haub Program is one of six Programs established since 1991 by FAS faculty in response to their perceived need for specialized knowledge within the MBA framework.

There are four broad areas within the Program:

- (1) To develop **education** for sustainability within York’s management courses.
- (2) To carry out applied **research** that will support and lead to curriculum change.
- (3) To **promote** education for sustainability and environmental management within other institutions offering management education.
- (4) To establish **partnerships** with other like-minded organizations.

To graduate from the MBA program, a student needs to have successfully completed 21 courses. Since 1994, the MBA program has offered a concentration in Business and the Environment. This consists of 4 courses, including the foundation course “Introduction to Business and the Environment”. York MBA students who are not pursuing the Business and Environment concentration can also take electives from among these courses. The courses include:

Introduction to Business and the Environment (Foundation course)
Applied Analysis in Business and the Environment
Environmental Economics for Business
Environmental Ethics
Policy and Management Perspectives
Case Studies in Environmental Management

Three additional courses are cross-listed with York's law school for a combined MBA/LLB course. These cross-listed electives are:

Environmental Law
Dispute Settlement
Resource Management

There are also two courses (i.e. Environmental Law, Waste Management) cross-listed with Environmental Studies.

Key components:

Delivery method:

Case study	Yes
Core courses or add-on	Both
Cross-institutional	Yes
Distance education	Planned
Experiential ¹⁰	Yes
Interdisciplinary	Yes
Internet/E-mail	?
Relevant literature	Yes
Role-playing	Yes

Key content and concepts:

Appropriate technology ¹¹	?
Environmental accounting	Yes
Environmental economics	Yes
Environmental legislation	Yes
Environmental literacy	Yes
Environmental reporting	Yes
Interdisciplinary	Yes
International dimension	Yes

¹⁰ Learning based upon direct experience, such as site visit.

¹¹ For example, pollution control through technological fixes

Organizational change	Yes
Paradigm shift ¹²	Yes
Systems thinking	Yes
Values and ethics	Yes

There is open recognition of the debate surrounding the necessity for a paradigm shift in business practice and responsibilities.

The National Management Education Project for Business and the Environment

With the first call for proposals in March 1996, The National Management Education Project for Business and the Environment is a 3-year project initiated by the Schulich School of Business. It is intended to complement the Erivan K. Haub Programme in Business and the Environment. According to its Request for Proposals form, its aim is “to develop curriculum materials that will aid in teaching issues related to the management of business and the environment for sustainability”. These materials will be based upon the development of case studies that examine how Canadian organizations (from a variety of business sectors) are responding to environmental issues.

Its first initiative is to invite competition for case study proposals from faculty and doctoral students in universities across Canada, with an emphasis on interdisciplinary and holistic approaches. The first call for proposals resulted in funding for the development of case studies from a pulp and paper company, and a hydroelectric company (Sutherland, personal communication). By the project’s completion, 12 case studies and 6 interactive role plays will have been commissioned from universities across Canada for use in graduate and undergraduate teaching and learning.

It will also sponsor a competition to develop innovative teaching approaches to environmental management in business.

The National Management Education Project also foresees the establishment of a resource centre offering information on sustainable business and environment practices. Finally, it will help develop a network of business school faculty and organizations,

¹² For example, alternative economics; debates around limits to growth

within Canada and abroad, that are committed to the merging of business and sustainable development.

Comments:

York's Schulich School of Business is at the forefront of developing a multifaceted, creative approach to learning for sustainable development within the business arena. The Haub Programme has only been in existence for 3 years, but its vision encompasses a range of approaches, from developing and offering formal university courses to carrying out related research.

The MBA programmes offered through the Haub Programme are recognized as being in a process of continued change and development. As Roome (1995) explains:

“The overall direction of the Faculty is not to see the concentration in Business and the Environment as the only route to environmental literacy. ... There remains a need to expose more students to environmental and sustainability thinking as part of the core and electives of the MBA as well as the other course offerings available through Faculty. On this point environmental change and sustainability were the focus of the introductory session to the 1995 York Executive Program”.

The National Management Education Project is similarly innovative with its interest in inviting and sponsoring Canadian case studies and creative new pedagogical methods from a number of Canadian universities, and in helping to build networks among like-minded faculty and organizations.

For further information:

Please refer to the enclosed two page insert “MBA Concentration in Business and the Environment” for course descriptions. Also refer to the bibliography for publications by Nigel Roome.

Conclusions and Recommendations

As discussed in the **Introduction**, sustainable development education involves recognition of the need for fundamental change and openness towards a new paradigm of how we do business with each other, within society, and within our environment, both for the needs of today and for the sake of the future.

The institutions and individuals identified in this report are all critical champions to bringing about this vital needed process of change. But they are champions in what may well be a particularly difficult time to be proclaiming the need for the courage and creativity to try new approaches to how we learn about and live within this world.

In the late 1980's and early 1990's, environmental concern was at the forefront of the Canadian agenda. The Brundtland Report had resulted in ripples of response across the public and private sector; the United Nations Conference on Environment and Development (the Earth Summit) --- led by a Canadian, Maurice Strong --- claimed national and international headlines; and discussions around the much-touted Canadian national "Green Plan" took place in communities across the country.

In the latter half of the 1990's, however, the priorities appear to be somewhat different. Economic expectations have been replaced by economic recession for many Canadians. "Downsizing" and "streamlining" have become common expressions in corporate and academic boardrooms and offices across the land. University graduates no longer look forwards with confidence towards an economically secure future, but rather look backwards and sideways ... to size up the competition for the few jobs that they perceive are out there for them. Jobs, not the environment, are often touted as first on the public agenda (with little recognition of the intrinsic connection between the two, despite the obvious example of the collapse of the ground-fisheries).

In my own very recent experience, an academic colleague lamented last week that business ethics as a field of enquiry is "dead", based on recent cancellations of business ethics conferences due to low registration and an experience with a publisher who pronounced frankly that "Sorry, the that business ethics fashion ... is over". Similarly, those who raise ethical or moral considerations on a business discussion list on the Internet are urged to stop wasting time and "get on with some news people can use".

This is not a time when universities, companies or individuals may be particularly open to new approaches and creative ideas. In times of fear, is there not a tendency to retreat towards the tried and true methods, and to take sanctuary in the status quo?

Ironically, as the NRTEE Committee on Education no doubt recognizes, the very real need to learn how to live sustainably has by no means retreated, except perhaps from the forefront of public consciousness.

In light of this rather sobering background, what steps can the NRTEE Committee on Education take to best support the efforts of those who are working towards bridging sustainable development and business education in Canada?

- As mentioned in the **Introduction**, there does seem to be some disagreement between business and educational measures that constitute “environmental management” and those that truly encompass “sustainable development” principles and processes. It might be helpful for the NRTEE Committee on Education to clarify its own thinking and objectives in this regard, if it has not done so already.

In researching this report, I have obtained copies of all the papers listed in the **Bibliography**. I would be glad to arrange for copyright permission to forward any or all of these to the NRTEE Education Committee members, if this would be of interest.

- A “core” group of individuals can be identified from the list of “key players”. It might be worthwhile for the NRTEE to bring these stakeholders together for a small, informal meeting (or to get in touch with each of them individually) to see how the NRTEE might best work with them in their similar endeavours.

(An existing “small community” was already identified to me as consisting of : Prof. Nigel Roome and Nancy Sutherland at York, Dr. Harrie Vredenburg at Calgary, Dr. Sanjay Sharma and Cathie Driscoll of Saint Mary’s.)

- Initial contact and discussion has taken place with Karen Fleming of the Canadian Federation of Business Deans Secretariat around the possibility of a NRTEE meeting of Deans linked to the annual conference in December. In the course of completing this and the previous report, a number of Deans and academics expressed interest in

the possibility of a meeting to discuss NRTEE interests in business and sustainable development education. A meeting or consultation with the “core” group identified above might help to clarify what such a NRTEE meeting with Deans might best achieve.

- Following on with the Round Table model, it was suggested by one of the identified “key players” (Dr. Sanjay Sharma of Saint Mary’s) that it would be useful to have a round table forum that brought business and academia together. This might take two approaches: one meeting that bridged that respective corporate and academic ‘champions’, and another that brought them together with what were described as the ‘unconverted’.

(It is recognized in this regard that in many ways business and academia are already “merging”, at least within the university context. An increasing number of University business deans are being brought in from corporate backgrounds.)

The NRTEE Committee on Education has an advantage in that it does not come under any particular “faculty” (as within a university setting) nor does it owe loyalty to a narrowly defined group of “stakeholders” (or “shareholders”, as they are usually described in business circles). Therefore, it may be able to raise ideas and suggestions for discussion that otherwise might not get raised.

- It would probably be helpful - and interesting - for NRTEE Committee members to register with some of the Internet list discussion groups that were identified in the earlier contract report. Lists I found particularly useful and interesting were:

ONE-L (Organizations and the Natural Environment)

Contact: ONE-L@clvm.clarkson.edu

IAB-L (International Association for Business and Society)

Contact: IABS-L@psuvm.pus.edu

SRB (Students for Responsible Business)

Contact: webmaster@SRBnet.org

- Business students themselves are another group the NRTEE might consider bringing to the table, perhaps together with corporate and academic “champions” of the validity of sustainable development. It was somewhat difficult to break through and identify the business students own motivation and interest in taking these type of courses voluntarily (e.g. as non-core courses).

I discussed this problem with some of my academic and corporate contacts. One typical response from an economics professor with an interest in sustainable development education was:

“Even leaving aside the problem that typical MBA students are steeped in a kind of free-market, corporate-tough-guy ideology along with their youth and inexperience, environment doesn’t come up much for the average manager”.

Those students that did respond to me often expressed their own doubts that sustainable development education was of value in the competitive, corporate world that awaited them on graduation. The students themselves who elect to register for these courses are to be seen as “champions” worthy of support and validation that their efforts and interests do indeed matter! Apart from the other constraints, an openness to sustainable development education implies a willingness to accept new methods and priorities. As one ethics teacher to MBA students pointed out, “Those students who were experiencing disequilibrium, who were confused about the ‘right answer’ and open to seeing the issue in new ways, saw themselves and were seen by others as indecisive (always with negative connotations in a business school environment) ...” Offering some avenues of support or discussion to business students with an interest in these types of initiatives might well be another valid and worthwhile role for the NRTEE Committee on Education. As the NRTEE already recognizes with its stakeholder round-table approach, you need champions from a number of different perspectives - academia, business, and from among the student body itself.

- Just as there is a need for environmentally literate MBAs, there is a similar benefit to be found in having economically literate ecology students! The lament of one university professor with a long background of working in the corporate community was that one got “either environmental scientists who don’t know management or MBAs who do not understand the holistic nature of business and the environment”. It

is well recognized that economists and environmentalists often work from fundamentally different world-views (the former which see economy as the base into which environmental considerations should fit; the latter which see the environment as the base into which economic requirements should fit). From my own experience as a university teacher - and as a student! - I believe that there would be real benefit to even more of a "cross-pollinization" between disciplines, with students from ecological and economic backgrounds working together on case studies (such as "Industrial Park as an Ecosystem"). This is not necessarily a "priority action" but a suggestion that I wanted to be able to bring to the NRTEE Committee on Education for their consideration.

- I will be attending the forthcoming "BELL Conference" (Business, Environment, Leadership and Learning) in Toronto (July 18-20, 1996), along with Carla Doucet of the NRTEE Committee on Education. This will hopefully give me a chance to meet in person many of the individuals that I have corresponded with on behalf of the NRTEE Committee over the past few months. No doubt, Carla and I will both leave the conference with more ideas and suggestions for "next steps" for the NRTEE Committee on Education, which we will submit for your consideration.

In summary, these are challenging times for suggesting fundamental changes and new paradigms in the ways we learn and do business, both within the University and corporate sector. The NRTEE Committee on Education has, I believe, a vital role to play in helping to provide support for the efforts that have already been launched, and in ensuring that these initiatives truly are leading towards "sustainable development" and not business-as-usual with a nod to environmental legislation.

While the necessity for economic profit is recognized as an ongoing component of business, it can no longer be the bottom line. Our present course towards the future is no longer a confident line, but a curving question mark. We must learn to adapt to this in our business and in our learning, if our sustainability is to be assured.

Bibliography

- Garrod, B. and P. Chadwick. 1996. Environmental management and business strategy: towards a new strategic paradigm. *Futures* 28(1): 37-50.
- Gladwin, T.N., J.J. Kennelly and T-S. Krause. 1995. Shifting paradigms for sustainable development: implications for management theory and research. *Academy of Management Review* 20(4):874-907.
- Lefebvre, Maurice and J. B. Singh. 1992. The content and focus of Canadian corporate codes of ethics. *Journal of Business Ethics* 11:799-808.
- Liedtka, J. 1992. Wounded but wiser: Reflections on teaching ethics to MBA students. *Journal of Management Education*, 16(4): 405-416.
- McIntosh, M. 1996. Certificate, Diploma and M.Sc. in Strategic Environmental Management. Course description. University of Bristol, Department for Continuing Education.
- Roome, Nigel. 1995. Education for sustainability: A critical assessment of the contribution of management education to the process of learning to be sustainable. Paper presented at the Fourth International Research Conference of the Greening of Industry Network. Research and Practice: Learning to Build Sustainable Industries for Sustainable Societies. Toronto, Canada November 12-14, 1995. 20 p.
- Roome, Nigel. 1994. Taking Responsibility: Management and Business. The Environmental Agenda Series: Promoting Sustainable Practice through higher education curricula. Pluto Press, London/Colorado. 69 p.
- Singh, J.B. and E.F. Carasco. 1996. Business ethics, economic development and protection of the environment in the New World Order. *Journal of Business Ethics* 15:297-307.
- Shrivastava, P. 1994. Greening business education: Toward an ecocentric pedagogy. *Journal of Management Inquiry* 3(3): 235-243.