

Minister of Industry,  
Science and Technology and  
Minister for International Trade



Ministre de l'Industrie, des  
Sciences et de la Technologie et  
ministre du Commerce extérieur

# Statement

# Déclaration

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**NOTES FOR AN ADDRESS BY**  
**THE HONOURABLE MICHAEL WILSON,**  
**MINISTER OF INDUSTRY, SCIENCE AND TECHNOLOGY AND**  
**MINISTER FOR INTERNATIONAL TRADE,**  
**TO THE**  
**CANADIAN BUREAU FOR INTERNATIONAL EDUCATION**  
**ON THE OCCASION OF THE INAUGURATION OF THE**  
**CORPORATE AFFILIATES PROGRAM**

**OTTAWA, Ontario**  
**July 14, 1992**

Good afternoon, ladies and gentlemen.

I welcome this opportunity to speak to men and women with such an important, co-operative role in building Canada's prosperity. I want to talk to you about the natural partnership of post-secondary learning institutions and business in preserving and improving Canadian competitiveness in a knowledge-based international trade environment.

This is a new era, and Canada must approach this new era the way Wayne Gretzky plays hockey: by skating to where the puck is going to be, not to where the puck is.

The federal government's priority is to persuade Canadians that prosperity depends on skating to where the puck is going to be and to help Canadians make the changes we must make, to keep skating to where the puck is going to be.

We have to look no further than the 1992 World Competitiveness Report to see that we must change. In 1991, Canada ranked fifth in the survey; the 1992 report, released in late June, ranks Canada 11th. The impact of the recession on our economic performance partly explains why the North American economies have slipped behind our competitors. Now that growth has returned to our economy, we should see better rankings next year. However, the factors which contributed to our slipping competitive abilities contains reason for concern and for action.

Why? Because, disturbing as our competitiveness ranking is, Canada fares even less well in two components used for the rankings: internationalization and science and technology. Among the reasons for Canada's poor ranking of 17th in internationalization and in science and technology are:

we are lagging in trade in services,

we rely too heavily on three export markets, and

we don't invest enough in the natural resources of the next century: knowledge, information and applied technology. More Canadian executives said their companies would cut research and development (R&D) spending over the next two years than executives in any other country.

It is clear that we are not moving to where the puck is going to be in international trade. Canadians must start moving to where the 10 countries ahead of us in the competitiveness ranking are.

If we do not move to where our competitors are, and to where our competitors are moving, then we will surely fail to live up to the promise of Canada. We will be unable to build a society that combines caring and fairness with abundant economic opportunity. We will not be able to continue to build the kind of caring society that reflects the Canadian character.

Moving to where the competition is going requires a plan on how to get there. That is why the federal government launched the Prosperity Initiative last fall. It is about getting Canadians involved in developing a plan of action to lead us there. That plan of action will require the concerted commitment of Canadians from all walks of life. Partnerships between the private and public sectors will need to become more commonplace -- partnerships like this, the Corporate Affiliates Program of the Canadian Bureau for International Education (CBIE). Your presence here at the inauguration of the program demonstrates your commitment to its three aims:

- to enhance the ability of Canadian business to operate successfully in an international environment,
- to develop Canada's human resources to meet the challenge of maintaining competitiveness in the international market, and
- to forge direct links between international trade and international education, to foster on-going collaboration between the two sectors.

I hope that this partnership between the college and university community and the private sector will be a critical element in turning around our poor ranking in terms of internationalization. Over the years Canada has trained thousands of foreign nationals at Canadian colleges and universities. These alumni constitute a largely untapped resource and competitive advantage to Canada of immense value. We must harness the good will and access that our role in the training of these men and women has given us. I see the corporate affiliates program doing just that: building trade by building on linkages.

For example, nearly a quarter of Canada's foreign students come from Hong Kong. For half a century Hong Kong's future leaders in business and government have chosen Canadian universities for further education. It is estimated that there are over 70,000 graduates of Canadian universities living in Hong Kong.

People like these are a direct resource for Canadian business. They play an important part in the \$1.9-billion, two-way trade relationship we enjoy with Hong Kong, the \$836 million in goods exported to the island last year and the nearly \$5 billion invested in Canada by citizens of Hong Kong in 1991.

Programs like this, aimed at developing the human resources, are critical to building the kind of knowledge-based economy we need to move in the direction of our competitors. Just as important is internationalization: the creation of links between Canada and other nations in all areas, not just trade. Canada's post-secondary institutions can lead the way to a greater awareness

among all Canadians of the world, and to greater knowledge about the world. That is why the efforts of the CBIE are so important. And it is for these reasons that I welcome this opportunity to speak to the Canadian Bureau for International Education and to the companies that support the Bureau. You have taken an important step in building a prosperous future for Canada.

A newly competitive Canada will be created through co-operation and partnership. Competitive businesses in the next century will be those that have found partners and strategic allies with complementary capabilities.

Co-operation and partnership are driven by market demand for sustainable and specialized products, non-stop innovation, more efficient computer-based production, flexibility and speed. The best product development comes from cross-functional teams that cut across traditional business boundaries and move into increasingly complex networks which include every part of our society. This type of partnership for competitiveness -- partnership which includes every segment of our society -- will keep Canada in the vanguard of international competitiveness.

No partnership makes more sense and is more natural than one between Canada's post-secondary institutions and business. None is more valuable to Canada's future than this natural pairing of the world of ideas and the world of making ideas a reality. Partnership and co-operation between Canada's post-secondary institutions and businesses can help businesses compete and prosper. They can help colleges and universities provide the skills and learning tools Canadians need to prosper in all areas, as individuals and as a society. They can help Canada compete and prosper as a knowledge-based industrial economy. Partnership and co-operation between industry and universities have long proven they can create new opportunities for business.

Working with the Food Science department of the University of Manitoba, Export Packers Co. of Winnipeg solved a problem and created a new product. The problem Export Packers faced was the disposal of 44,000 kilograms of wet egg shells every week -- the waste from the company's production of dehydrated egg powders and liquid frozen egg yolk used in food processing. It was costing Export Packers \$100,000 a year in trucking charges to take the egg shells to a waste disposal site. The company found that there is a market for dry egg shells as a calcium substitute in chicken feed. Working with the researchers at the University of Manitoba, they developed and tested a process to dry and powder the egg shells. This process has created a new, \$100,000-a-year market for Export Packers, cut the company's handling costs and helped the environment by cutting down on waste dumped in disposal sites.

Partnership and co-operation between university and business can take an innovative idea, enhance it with specialized knowledge and turn that idea into a useful product. Hartronix Limited of Concord, Ontario felt that available fetal monitoring equipment did not make full use of current computer technology. They set out to design equipment that would give doctors information they could use, but Hartronix had to know what information doctors needed. They turned to the Faculty of Medicine at the University of Toronto to help them design software that provides clinically acceptable and useful information. Hartronix and the Faculty of Medicine are continuing their collaboration.

Partnership between universities and business can benefit a university. For example, the University of Waterloo encourages the entrepreneurial spirit which, in turn, has resulted in the creation of several spin-off companies. About 25 private sector companies got their start from research work at the University of Waterloo. These companies earn the university over \$2 million a year in royalties.

At the University of British Columbia, about 10 companies have been started in the last year based on research launched by UBC researchers, which earns the university about \$500,000 a year from royalties. There are many, many more examples of partnership and co-operation between the academic world and the business world.

Partnership between the two worlds is more important now than ever. We live in a time characterized by change -- unrelenting, fundamental change in every human activity. Post-secondary education has a role in developing, sharing and spreading knowledge which goes far beyond the lecture hall and the seminar room. Canadian universities have become major research centres, doing more than 25 per cent of Canada's basic and applied research.

University co-operation and partnership with industry is not a new development. One of the longest and most successful is PAPRICAN, the research partnership between the Canadian Pulp and Paper Association, McGill University and the University of British Columbia. Since 1927, PAPRICAN has done basic and applied research in pulp and paper, has trained university students in pulp and paper research, and has conducted training courses, seminars and workshops dealing with science and technology problems in the industry.

A unique problem is being studied by researchers in British Columbia. Pharmaceutical researchers have found that the bark of the Pacific Yew tree produces taxol, which is used to treat a variety of cancers. While pharmaceutical and medical researchers work with taxol, forestry and botany researchers are tackling another problem -- availability of the Pacific Yew. The tree is

scarce and slow-growing, and an estimated half-million trees a year are needed to meet potential demand for taxol. Foresters and geneticists are working on ways of increasing the tree's growth rate and its yield of bark. This type of research, which depends on bio-diversity, will become more and more important as medical, pharmaceutical and chemical researchers discover more uses for natural resources.

Industry-university research is not only in science and technology. In Vancouver, the Financial Executives Institute, the University of British Columbia, Simon Fraser University and the British Columbia Institute of Technology co-operate on research in financial issues and provide each other with resource personnel.

Universities have a unique place in our civilization. Just as the university was the centre of learning and culture in the 12th century, it is a centre for learning and culture in the 20th century. The university has endured through 10 centuries of change by providing continuity -- by bestowing skills and knowledge from one generation to the next, to meet the ever-changing demands of society. Furthermore, by pursuing knowledge in all fields, by exploring the new and challenging the old, by questioning and offering answers and by building new knowledge on old, the university was a centre of innovation long before business knew the meaning of the word.

The university and the college have endured in Western society by developing and passing on the technology that frees humanity from drudgery and enables it to advance. Universities and colleges have endured by teaching reason, and by teaching the critical abilities essential for informed judgments, for adapting to change, for advancing intellectually, for solving problems.

That endurance, that challenging of the status quo, that embracing of the new and challenging, that spirit of disciplined enquiry, that commitment to sharing and spreading knowledge across generations and national boundaries -- all these can help Canadians achieve their potential and compete in the new world economy.

Canada's post-secondary learning institutions already do a world-leading job in educating and preparing Canadians for the future. Almost five of every hundred Canadians is enrolled in a post-secondary institution -- the second-highest ranking in the world, after the United States. A university degree is not uncommon in Canada: 11.1 per cent of Canadians over 15 years old have degrees. Another 21.4 per cent have a post-secondary diploma. Canada spends about \$9 billion a year on university education, and another \$3.6 billion on colleges.

Universities and colleges have a greater and more important role than basic and applied research and development in ensuring Canada's prosperity in the new, knowledge-intensive world economy. That role is in helping Canada and Canadians shift to a knowledge-based economy.

Universities and colleges have an important part to play in creating the learning culture that is so necessary for our international competitiveness. They are at centre stage in any effort to know about and understand other nations of the world, and to reach out to those nations.

The federal government has already joined in partnership with post-secondary institutions to help them apply their skills, their experience and their knowledge to the task of making Canada a more competitive international trader. Through programs such as Canada Scholarships Program, Science Culture Canada, InnovAction and the Network of Centres of Excellence, the federal and provincial governments support and encourage science and technology. These programs, together with the Corporate Affiliates Program we are inaugurating today, serve to promote the development of a knowledge-based economy -- an economy which invests in human capital and supports life-long learning and international understanding.

Canadian commercial education and training services have considerable potential -- potential that is not being met. My department, Industry, Science and Technology Canada, is committed to strengthening the commercial education and training sector of our economy. ISTC officials are now working with industry and with educators on an in-depth analysis of industry and its competitive environment, and are developing an action plan to improve Canadian performance.

Universities and colleges are an important part of this process, particularly in light of the move to teaching and learning outside the traditional classroom, and the abundant international opportunities. Through organizations such as the Canadian Bureau for International Education, Canadians can meet and deal with scholars and students from other nations -- and scholars and students from other nations can learn about Canada and Canadians.

The linkages created by the Canadian Bureau for International Education can be built on and strengthened for the benefit of all. This Corporate Affiliates Program is an opportunity to create and develop new opportunities for Canadian business and for Canadian post-secondary institutions. It is an important step to moving to where the puck is going to be in international trade.

Thank you.