Canada's learning requirements. About 70 per cent of Canadians now in the workforce will still be working in the year 2000. But 85 per cent of the technology that will be in place by then has not been invented yet.

That tells us that there will be an enormous demand upon acquiring new skills in this decade. How does Canada fare in training? In terms of the effectiveness of company training programs, we rank 20th in the OECD -- near the back of the pack. Our companies spend half of what American companies spend on training, one-fifth of what Japanese companies spend, and one-eighth of what German companies spend.

Today, only 23 per cent of new jobs require 16 or more years of education. By the year 2000, that will nearly double to 40 per cent. And nearly two-thirds of all new jobs will require a high school education. How are we going to be ready for the learning demands of the workplace if we continue to see 3 out of 10 high school students drop out? Many of them join nearly 4 in 10 adult Canadians who have significant difficulty with everyday math and reading.

On the other side of the coin, Canada has one of the highest university enrolments per capita in the world. That is good news. But the bad news is that, in a world dominated by technological change, the enrolment in engineering and natural science programs is declining as a percentage of total enrolment.

This brings me to the second of the five areas: science and technology.

Canada ranks with Italy as the G-7 country that spends the lowest percentage of output on R&D; Germany, Japan and the U.S. each spend at least twice as much as we do. But at the same time, Canada's R&D spending runs ahead of OECD averages in the electronics, aerospace and computer sectors, and private sector R&D in this country has grown by 6.5 per cent per year, in spite of the recession.

But we still have a long way to go. Only 4 manufacturing companies in 100 are doing any research at all. The top 10 companies account for nearly 40 per cent of private sector R&D spending. To perform research and development into new technology is one thing. Equally important is our ability to use new technology.

But the rate of application of new technology to industrial processes in Canada is low. A 1989 survey found that less than one-half of Canadian manufacturers had implemented none of some 22 leading manufacturing technologies, such as robotics and computer-aided design, that provide the key to productivity in the 1990s.