

Address to the Women's Canadian Club, Montreal

16 September 2013

## **Open Learning Transforming Our World**

Sir John Daniel

### Introduction

I am grateful for the invitation to address you and honoured to be the first speaker of your programme for 2013-14. In thanking Pat Roman for making the arrangements and for her kind hospitality, let me recall that we first met in the early 1980s.

The Canadian Society for the Study of Higher Education, of which I was then president, had decided to set up a small secretariat. McGill had offered space. So my Université de Montréal colleague Charles Bélanger and I sought an exceptionally multi-skilled individual to establish the office. Pat was looking for part-time work at the time and was the perfect person to get the show on the road. We have been friends ever since and I shall recall in a moment how she helped me again with another important project a decade later.

It is also a pleasure to be back in Montreal. This was my first home in Canada after I arrived here by ship in 1969 to teach at École Polytechnique. We lived in St. Lambert. Eleven years later, when I returned to Montreal as Vice-Rector at Concordia after jobs in Quebec City and Edmonton, we lived in Westmount. So, even though I now live at the other end of the country in Vancouver, I consider Montreal to be my city. My youngest child and my oldest grandchild were born here, and I am particularly proud to hold degrees, either earned or honorary, from all four of Montreal's universities.

My title is *Open Learning Transforming Our World* and my focus will be on some of the key changes that have occurred in education at all levels in our lifetimes. I have had the great good fortune to be closely involved in several of those changes, both during my 17 years as a university president in Canada and the UK, and also during 12 years as a senior international intergovernmental functionary in both the United Nations system and the Commonwealth. I shall make several autobiographical comments, both to recall my involvement with some of the processes that I shall describe, but also to explain how the term 'open learning' came to define my own professional values.

Let me start there. I came to Montreal in 1969 after studying for nine years in a school founded in 1553 and for eight years in universities established in the 13<sup>th</sup> century. I had been appointed as assistant professor of metallurgical engineering at École Polytechnique, Université de Montréal. My job interview took place in the bar at Orly airport in Paris because France was still disrupted by the upheavals of May 1968.

I was now a university teacher and as I adapted to my new context teaching francophone Quebecers in North America I decided that it would be helpful to learn something about

Education. Later I realised that this was a deviant thought for a young engineering academic, but by that time I had scouted out the possibilities in Montreal and enrolled, part-time, in a Master's programme in Educational Technology at Sir George Williams University. So after my day's work at Poly I would head down Cote des Neiges and join the thousands of working Montrealers heading into Sir George for evening courses to extend their education. My Master's was a two-year programme for full-time students that included an internship and a thesis. Both proved significant for me.

The internship required us to spend three months working in an organisation that was using educational technology. This was 1971, and suddenly there were frequent stories in the press about a startling innovation, in Britain of all places, called the Open University. It had abolished academic prerequisites for admission, took a first class of 25,000 students, and used a range of technologies, including radio and TV programmes on the BBC, to teach people wherever they lived.

It sounded to be just what I was looking for and Poly generously allowed me to spend the summer of 1972 as an unpaid intern over in the UK. Those three months in Milton Keynes were a life-changing experience. The scale of the operation, the idealism of the staff, the motivation of the students, the use of technology – I had never seen anything like it. I had seen the future and I wanted to be part of it.

So, to quote T. S. Eliot, I returned to Montreal 'no longer at ease in the old dispensation'. But I was lucky. Two weeks after I got back *Le Devoir* carried a recruitment advertisement for a director-general for the Université du Québec's new Télé-université, which was clearly inspired by the UK's Open University. I applied.

Any normal university would have binned this application from a young anglo almost fresh off the boat, but instead they called me up to Quebec City for interview. The president of the Université du Québec, Alphonse Riverin, told that while I was not an appropriate candidate to head this new institution, I seemed to be the only person in Quebec who had actually seen an open university from the inside. Would I like to join the Télé-université and set up an educational technology unit? I said yes, Polytechnique generously gave me a year's leave without pay, and we moved to Quebec City. After a year there I was having so much fun that I resigned from Poly and began a new career in distance or open learning.

I spent four absorbing years in Quebec City. Quite apart from the work it was a fascinating political experience, which may interest you as members of the Canadian Club. Since the Télé-université aimed to teach at scale across the whole of Quebec it was a magnet for young nationalist academics that wanted to break out of the old orthodoxy. They were sharp, energetic and splendid people with a great sense of humour. By the time the 1976 Quebec election came around I had become director of studies. Four of my professors were elected to the National Assembly and three of them became ministers. I

still relish the memory of these somewhat bohemian colleagues going out to buy suits and getting used to being driven around in limousines.

And while I am reminiscing about my contacts with the Parti Québécois, let me add that a decade later, when I was president of Laurentian University in Sudbury, we invited René Lévesque to give a lecture. I went to meet him at the airport and bummed a cigarette off him on the way back to campus. He was a remarkable man.

### The Four Opens

But let me return to the main plot. I was marked for life by my internship at the Open University and by the mission and values expressed in its slogan: open as to people, open as to places, open as to methods and open as to ideas. I shall take you through these ‘four opens’ to suggest how open learning is indeed transforming our world by removing barriers to successful study.

When the Open University abolished all requirements for admission except to be aged 18 or over, many in conventional universities considered that this policy heralded the end of civilisation as they knew it. But it works well. Motivated adults who have decided that they need to learn more to get on in life have a terrific capacity to catch up and succeed. Today this is widely accepted, but 40 years ago it was radical.

Of course, it is not enough to have open admission. You have to teach people. Hence ‘open to places’. The first president of the Open University asked the staff to design a teaching and learning system that could engage a lighthouse keeper on an island off the Scottish coast. Today, of course, the Internet allows us to take distance learning for granted, but forty years ago it was a challenge.

In the popular image the Open University taught through radio and TV using its partnership with the BBC. In reality these broadcasts only accounted for a small part of the students’ work. The Open University also revolutionised the use of text as a teaching tool, producing quality materials for each course. Above all, it provided close support to students through a network of many thousands of part-time tutors, mostly academics in other universities, who looked after groups of 25 students: commenting on and marking their assignments, being available to give advice, and offering optional face-to-face tutorials locally. In this spirit the Open University uses the term ‘supported open learning’ to describe what it does. If you ever saw the play or the film *Educating Rita* they will have given you an idea of the impact of the Open University, although they involve plenty of poetic licence!

Naturally this example of teaching cost-effectively at scale was widely copied. Many countries have since created open universities and their aggregate enrolments now number in the tens of millions.

To pick up the autobiography again, after the Télé-université I went west to Athabasca University in Alberta, came back to Concordia and then served for six years as president of Laurentian University in Sudbury. But a dream came true in 1990 when I was appointed president, or vice-chancellor, of the Open University and moved to Britain. I spent an extraordinarily fulfilling 11 years leading this institution that I had admired ever since my internship 18 years earlier. We grew the Open University from 100,000 students to over 200,000 and established a world leadership in online learning that continues to this day.

But I must also make a confession. I told you that I had enrolled in the Master's programme at Sir George, but not that after completing the coursework and the internship I dropped out without doing the thesis. I continued to enrol in various other programmes as a part-time student and when I moved to the UK in 1990 I had just completed a diploma in Theology (by distance learning of course). I thought it might be interesting to do a law degree.

At this point my long-suffering wife sat me down and suggested robustly that if I wanted to become a student again I should finish the programme that I had begun at Sir George Williams University (now Concordia) in 1970. This seemed like a great idea and I wrote to Concordia asking to be re-admitted. I received a sublime letter back that said: one, that they didn't re-admit people after ten years; two, that all the courses I took in the 1970s were obsolete and no longer in the programme; but that three, they had looked at my CV and it seemed I had made good use of my studies. So they let me back in to do the thesis.

Pat Roman then came to my rescue again and offered me a room in her basement for the month of leave that the Open University gave me to do the thesis. I happened to arrive in Montreal as the writs went down for the 1995 referendum on sovereignty. Westmount was ablaze with the gorgeous colours of fall as I commuted between Pat's basement and the Concordia library. We went together to the big 'No' rally in Dominion Square and then, on October 30<sup>th</sup>, Pat, Ted and I passed a nail-biting evening around her kitchen table as we listened to the results coming in. Ted had put a bottle of scotch in the middle of the table, but we did not touch it until the result swung to 'No' by the narrowest of margins. The next day I returned to the UK and, as the taxi took me to Dorval, the first snowflakes of winter began to fall.

### Mega-universities and MOOCs

I had written a thesis about the mega-universities, a term I coined to describe the open universities that enrolled more than 100,000 students. There were 11 of them around the world at that time. The thesis later became a book, *Mega-universities and Knowledge Media: Technology Strategies for Higher Education*. It came out just as the more alert universities began to reflect on the implications of the Internet for their missions of teaching and research.

That was in 1996. Things have moved on greatly since then. In the last five years nearly all universities have tried to engage with online learning in some way. So far the quality is not brilliant, but it is getting better. However, the more recent sensation, of which you may have heard, is MOOCs. A MOOC is a Massive Open Online Course. The name was coined for a course offered by the University of Manitoba in 2008 but MOOCs became news when MIT, Stanford and other big name US universities began offering them last year. To give one example, MIT offered a free course, *Circuits and Electronics*, which enrolled 155,000 people in 160 countries. Only 7,000 of them passed the final exam.

There are two major problems with MOOCs. The first, for the students, is that they do not lead to credit. If you jump through a number of hoops you can get a certificate, but you cannot put this towards a degree at the university offering the MOOC. The second problem, for the universities, is that there is no business model. MOOCs cost money to create and offer, but since they are free to the learners who take them this is a form of philanthropy.

Despite these two problems universities around the world are falling over themselves to offer MOOCs. There is a herd instinct at work. If Harvard is doing it, we must do it too. Obviously this cannot last and observers of the scene predict quite a shakeout in 2014. However, the good news is that the MOOCs craze has given added impetus to the offering of regular credit courses online on smaller scale. This is what will create a revolution in higher education.

I will leave it there for higher education. For most people around the world higher education is a distant dream, but basic education is a necessity.

### Education for All

In 2001 I became the Assistant Director-General of UNESCO with responsibility for education. My main task was to coordinate a campaign, begun in 1990, to get all the world's children into primary school. Over the 1990s this campaign had actually gone backwards. Because of population growth the number of kids out of school had actually increased. But in 2000 heads of government made the Millennium Declaration at the UN and 'Education for All' became a central plank of the international development agenda.

My job was to coordinate the efforts of the various players involved in implementing this agenda. They included the World Bank, UNICEF, the international development agencies of the rich countries, such as CIDA in Canada, and many NGOs. We approached the challenge in a conventional way. In my view there are no magic technological solutions to primary education. You have to build schools, train teachers and persuade parents that school is worthwhile.

I am pleased to say that this campaign has been largely successful. In getting kids into primary school, many developing countries have achieved in a decade what took some of the richer countries almost a century. There are, of course, gaps. Pakistan and Nigeria, in

particular, will struggle to get all their youngsters into primary school by the target date of 2015 set in the Millennium Declaration.

But success in one area creates problems in another. There is now a tidal wave of children coming out of primary school and looking for secondary education. Precise figures are hard to come by and depend a lot on definitions, but it is fair to say that there are hundreds of millions of children between the ages of 12 and 17 who are not in school. Many governments, having spent so much of their budgets achieving universal primary education, simply do not have the funds to expand secondary schooling in conventional ways.

Yet secondary education is vital, particularly for girls. This is because educating girls is the most promising way of reducing the population growth that is a primary driver of climate change. Women with secondary education have, on average, 1.5 fewer children than those with only primary schooling. Just a one-child difference per woman represents 3 billion more or fewer people on the planet by the middle of the century.

The good news for expanding secondary education is that it is more amenable to technological innovation and cost reduction than primary education. Three years ago I wrote another book, called *Mega-Schools*, which shows how the open university methods that I described can be used to conduct secondary schooling and teacher training at scale.

This was a major focus of our work at the Commonwealth of Learning in Vancouver, where I held my last appointment. Thanks to the efforts of my colleagues open schools are multiplying around the world, not only in countries like India, where the national Open School enrolls 1.5 million pupils, but also in smaller countries like Namibia and Trinidad & Tobago, where they help to address a number of challenges in the education and training of youth and young adults.

#### PISA and the quality of education

Before I leave secondary education I should say a word about the developed world. You may have heard of PISA. I don't mean the leaning tower, but a Programme of International Student Assessment operated by the OECD, the Organisation for Economic Cooperation and Development. PISA regularly tests 15-year olds in about 40 countries for their competency in Reading, Science and Mathematics. These are universal tests of critical and analytical thinking which have been refined so thoroughly that few people now accuse them of cultural bias.

PISA has put the cat among the pigeons as ministers of education try to explain away their countries' poor results or to do something about them. PISA generates a huge amount of data but focuses particularly on the average scores and the range between the best and the worst performing pupils in each country. You will be pleased to know that Canada is a top performer on both counts, right up there with the star countries like Finland, Poland and Korea. Indeed, if you break out the provinces separately Quebec is

almost at the top of the world table in Mathematics and Alberta in Reading. Conversely, countries such as the US, France and Germany perform much less well, with low averages and also a large spread between the best and the worst.

If such things interest you I recommend a recent book by an American journalist, Amanda Ripley, with the title *The Smartest Kids in the World and how they got that way*. It's an engaging read, because she tells the story through the eyes of American secondary school exchange students who went to Finland, Korea and Poland. My only regret was that she could not find an American exchange student to follow in Canada. Given the cultural similarities between our two countries, the difference in the quality of our education systems is startling. Why is schooling in Canada so good and schooling in the US so mediocre? What would an American pupil from Oklahoma find different if they were to attend a school in Alberta?

### Open Educational Resources

We can return to these questions in discussion, but let me first conclude by noting another development that helps to open up learning. You have heard of open source software and possibly of the global campaign to ensure open access to the results of research conducted with public funds. There is now a third element of this drive towards openness that is gathering momentum fast. This is Open Educational Resources. The idea is simply that educational material, especially when it is created with public funds, should be freely available for re-use and adaptation by anyone. I spent much of my last year at the Commonwealth of Learning working with UNESCO to promote Open Educational Resources to governments. This culminated in the World Open Educational Resources Congress held in Paris a year ago, which approved the Paris Declaration urging governments to make educational materials available rather than locking them away under copyright.

Again, I am proud that Canada is in the lead. My own home province of British Columbia is now offering students free online, open textbooks for the 40 most popular post-secondary courses. There is now a convenient way of identifying such materials, which normally carry what are called 'Creative Commons' licences that tell you how you can copy, modify and distribute them.

### Conclusion

There is much more that I could say about how open learning is transforming our world, but I suggest that we tackle the issues of particular interest to you in discussion. Earlier I recalled the slogan of the Open University: open to people, open to places, open to methods and open to ideas. That could serve as a description of the way that the world of education has changed and the way that education has changed the world in the last half century. We are progressing to the point when all the world's people will have a basic

education and many of them will have a huge choice of opportunities for postsecondary education and training through the Internet. It will be a world transformed.

I have had the great privilege of being closely associated with many of those developments over the last 40 years and it has been a pleasure to talk to you about them today.