Open Learning: The Essentials

Sir John Daniel

Good afternoon. I join you from Vancouver where it is just past midnight.

It is a pleasure to address a group in India again and to join you at the Campus of Open Learning.

I first came to India 42 years ago to visit the late Professor Ram Reddy, who was then working to create the Andhra Pradesh Open University, now the B.R. Ambedkar Open University. Later, as you know, he went on to establish the Indira Gandhi National Open University.

He was one of the great pioneers of open and distance learning, not only in India but internationally. In June 1995, just before his untimely death, I was honoured to receive an award alongside Professor Reddy from the International Council for Open and Distance Education at its conference in Birmingham, UK. Earlier we had both been involved in the creation of the Commonwealth of Learning, COL. I am proud to have been his colleague and dedicate this talk to his memory.

My title is 'Open Learning: The Essentials'. I started working in open and distance learning 53 years ago when I joined TÉLUQ, the open university of Quebec in Canada. My long involvement in open learning included being president of Ontario's Laurentian University, vice-chancellor of the UK Open University, assistant director-general for education at UNESCO, and lastly, president of the Commonwealth of Learning. It has been a fascinating journey.

What have I learnt about ODL? I shall distil my experience into some simple advice about successful distance learning by posing two questions. First, why do we need to open learning and what principles underpin it? Second, how do we provide open learning so that learners succeed?,

Teaching people at a distance has a long history, but I will start in the 19th century when the development of railways created postal services. Correspondence education became possible and was adopted in various parts of the world, including India, where your University of Delhi pioneered this mode of teaching in 1962.

Other Indian universities also started offering correspondence courses and in 1984 Ram Reddy created the Andhra Pradesh Open University. Later your government mandated all states to create their own open universities. Fourteen are listed on Google and I have visited several of them.

In 1989 you also created the National Institute of Open Schooling which has had a cumulative enrolment of over 4 million pupils in the last five years. I worked closely with NIOS when I was at the Commonwealth of Learning. We helped other countries to collaborate with NIOS and draw on its expertise to create their own open schools.

India has enormous expertise in open and distance learning and, as a foreigner, I offer my analysis in all modesty. But it's sometimes useful to go back to basics.

First, why open learning? Democratic societies need all their citizens to achieve their full potential, which means giving them access to as much education and training as they can usefully absorb. Fifty years ago, countries focussed mainly on training their elites to a high level. They offered ordinary people just enough education to make them productive workers for simple jobs and cooperative citizens in society.

Today we expect more. When I joined UNESCO in 2001, my primary task was to drive forward the United Nations campaign for Education for All. The Millennium Declaration had set the goal of getting all the world's children into primary school. Today the UN's Sustainable Development Goals call for all children to go through secondary education and for tertiary education to be available to all who can benefit from it. Your Campus of Open Learning is an excellent example. It offers a wide range of practical courses to help people improve their skills and livelihoods.

Governments must work on three dimensions to facilitate education and achieve these goals. First, make education **accessible** to all. Second, ensure that the **quality** is good. Third, keep the **cost** low.

Let's construct a triangle with these three dimensions.

Our aim is to expand the sides representing access and quality but to shrink the cost side. However, there is a problem. Classroom teaching, which still accounts for most of education today, does not allow that.

Expand **access** to the classrooms by taking more students. You will need more teachers so the cost will rise.

Improve **quality** with more good teachers and better learning materials. The cost will rise again.

Let's cut **costs** directly with fewer teachers and poorer facilities. Both quality and access will drop.

That's why I call it the Iron Triangle. It has restricted the development of education throughout history. People make an insidious link between quality and exclusivity.

But there is a solution - which is technology.

Technology allows you to widen access, raise quality and lower costs - all at the same time.

This is not a new idea and I'm not talking about artificial intelligence. I refer to the 18th century economist and moral philosopher Adam Smith, whose famous book, *The Wealth of Nations,* explained the principles underpinning the industrial revolution, which replaced cottage industries with mass production.

Smith's three key principles of mass production are **division of labour**, **specialisation** and **machines**. Since the 18th century these three principles have been adopted in most of our economic activities to give **economies of scale**. That's how factories work. Thanks to these principles more people today have a decent standard of living than ever before.

But I said, 'most of our economic activities'. The major exception is education, which still mostly functions as a cottage industry. Usually one person, the instructor, is responsible for

all parts of the lesson, preparing it, teaching it, and assessing the students. Classroom teaching is a time-tested method of education. Sometimes it is done well - but often it is done badly.

The systematic application to education of the principles that Adam Smith identified in the industrial revolution began when people first offered education at a distance. Here at the University of Delhi in 1962 you based the School of Correspondence Education on these principles:

Division of Labour: you divided up the teaching function. Some staff wrote the course materials, others organised their distribution, and others marked the students' work.

Specialisation: Each function had to develop new expertise because preparing and distributing learning materials for thousands of students was more complicated than giving out notes in class.

Machines: This meant a new reliance on machines for printing, binding, shipping and communicating with students.

Combining these principles gave you consistent quality and economies of scale. Once materials and systems were in place the marginal cost of serving an extra student was low. Since these courses attracted large numbers of students they generated lots of money for the universities. I won't elaborate on the problems that this caused. Let me just say that not all the profits from correspondence courses were spent on giving a better experience to the students taking them.

Open universities were created, in part, to address this ethical problem. They judged that correspondence schools offered access to courses but not necessarily access to success in those courses. Putting it brutally, the greater the number of students dropping out before finishing their course, the greater the profits for the institution that had already banked their course fees.

The ideal of open universities - not always achieved of course - was to give such good academic support to each student that they would have every chance of completing and passing the course.

I turn to the second part of this address - how do we open learning so that all can succeed?

Distance education has three basic elements: the development of learning materials; providing support to students; and ensuring that the logistics of distribution and communication work well.

Think of it as a three-legged stool. All three legs must be strong or it doesn't work.

How do these elements align with Adam Smith's three principles of division of labour, specialisation and machines?

Walter Perry, the founding vice-chancellor of the UK Open University, said that the UKOU's most significant innovation was the course team. Instead of being prepared by a single academic, courses are developed by teams. They include academics with diverse specialties, as well as instructional designers, educational technologists, media producers and editors.

Such teams embraced all three of Smith's principles: division of labour; specialisation; and machines.

In student support, the division of labour is radical: the many tutors who advise students and mark their assignments were not involved in the course team that developed the course. Their role is to help students understand the course content developed by the team - not to teach their own version of the topic. Tutoring is a specialised skill and the Open University trains tutors in good practice before appointing them. For many students the tutor's role is crucial.

During my eleven years as vice-chancellor of the OU, I had conversations with some 50,000 graduates as they crossed the stage at convocation. Many told me that without their tutor's support and encouragement they would not have succeeded.

Over the last 50 years, there have been big changes in the technologies used in student-tutor communication. In the 1970s much communication was by mail, so a UK postal strike soon after the OU began teaching in 1971 created a crisis that was only solved by a huge collective effort to bring the community together.

Today much communication is electronic, by e-mail, text messages, or Zoom but the basic aim of tutoring: to maximise the chances of success for every student, is the same.

Finally, technology has also helped with the logistics of open and distance learning. When I wrote my book *Mega-Schools, Technology and Teachers: Achieving Education for all* in 2010 I was surprised to learn that your National Institute for Open Schooling had already made it possible for tens of thousands of its pupils to register online.

So far I have not mentioned artificial intelligence (AI) and I will only say this.

When you assess what AI or any other new technology can do to open up learning you should ask two questions:

First, will it sustain the economies of scale that are the basis of cost reduction?

Second, will it help engage students' interest and stimulate them to study successfully?

In short, does the new technology also break the iron triangle, which is the key to openness?

What is openness? I simply leave you with the statement made by Geoffrey Crowther, the UKOU's first chancellor, at its inauguration in 1969.

It happened in the week when space opened up to the first human landing on the moon. New things were possible. Crowther said that the UKOU would be:

- open as to people

- open as to places

- open as to methods, and

- open as to ideas.

Usually, in talks like this, I focus only on openness to people, places and methods. But the situation in today's world requires more emphasis on openness to ideas too. The academic freedom to teach ideas is under systematic threat by some governments. The United States is

the worst example. Its Declaration of Independence says it is 'self-evident' that all people are created equal. Yet its present government is trying to stop universities from discussing the ideas of diversity, equity and inclusion that underpin the principle of equality.

Worse the US is pressuring the rest of the world suppress these ideas too.

We must resist. The open learning movement and the Open Campus of the University of Delhi should fly the flag of openness and equality high up the mast.

So, be open to people, open to places, open to methods and open to ideas.

I wish you well and thank you for your attention.