Contact North Webinar

**'Lessons from the History of Online and Distance Learning:
Simple Concepts to Guide us into the Future'**

Sir John Daniel, O.C.
Chancellor, Acsenda School of Management, Vancouver

Introduction

TITLE SLIDE

Good day to you all. I've had a long association with Contact North | Contact Nord and it's a great pleasure to deliver this webinar. I was a midwife at Contact North's birth in Sudbury in 1986 when I was president of Laurentian University. Since then Contact North has done a superb job of serving the people of Ontario for more than three decades, thanks in great measure to the inspired and sustained leadership of its head, Maxim Jean-Louis.

ECOLE POLYTECHNIQUE

I've been engaged with open and distance learning for 50 years. It began when I was teaching Metallurgical Engineering at École Polytechnique in Montreal: my first job. I thought that as a rookie academic, I should learn more about Education.

SIR GEORGE WILLIAMS

The most appealing part-time study programme in Montreal then was a Master's in Educational Technology at Sir George Williams University. It took me 25 years to complete the programme but it was a life-changing experience.

TELUQ, AU, CONCORDIA, LU, OU

It inspired me re-orient my career to distance education and led to a very exciting odyssey through appointments at the Université TÉLUQ, Québec; Athabasca University, Alberta; Concordia University, Montreal; Laurentian University, Ontario, and the Open University in the UK.

That means I've experienced open and distance learning, or online and distance learning, which I shall conflate into the acronym ODL, in various forms and jurisdictions.

I began my career in ODL in the days when – and I exaggerate only a little – you could have held an international conference on distance education in a phone kiosk!

TONY BATES QUOTE

What a contrast to today! Thanks to COVID-19, everyone is 'crashing into online learning', to use the expressive term of Contact North's distinguished research associate, Professor Tony Bates. He collected reports in the spring of this year and, after observing the worldwide scramble

to get online, concluded that the results 'were not pretty'. Institutions did the best they could but most students were less than fully satisfied.

Now institutions are starting another term. The constraints imposed by health authorities will vary by jurisdiction, but in most places institutions must still be ready to switch back to distance learning if infections rise fast.

Today I shall share four sets of concepts that may help you in using ODL for the longer haul. The more you work in an area, the simpler the basic concepts appear, so these four are the distillation of my 50 years in the field.

STRUCTURE

Online and distance learning (ODL) is a simple process. Reviewing its 2000-year history, from St. Paul's letters to MOOCs (Massive Open Online Courses), reveals four sets of basic concepts: two trios and two dyads.

The first trio, which I call the Iron Triangle, identifies the revolutionary impact technology can have on education. The second trio, the Three-Legged Stool gives us the secret of quality ODL.

Two related dyads, Independence/Interaction and Synchronicity/Asynchronicity, recall that effective ODL demands a balance of pedagogy. Understanding and applying these concepts can help teachers and institutions integrate ODL into their programmes more effectively as we slide out of the COVID-19 pandemic into a new normal – whatever that will be.

I shall begin with the two trios, then pause for questions and comments before moving to the two dyads.

The Iron Triangle

I lead off with the Iron Triangle.

Throughout history education systems have aspired to three objectives:

CENTRAL CHALLENGE

- Access: to be as wide as possible

- Quality: to be as high as possible

- Cost: to be as low as possible

TRIANGLE

The nature of the challenge is clear when you create a triangle of vectors.

With traditional methods of face-to-face teaching this is an iron triangle.

STRETCH

You want to stretch the triangle like this to give greater access, higher quality and lower costs.

But you can't!

EXTEND ACCESS

Try extending access by packing more students into each classroom and you will be accused of damaging quality.

IMPROVE QUALITY

Try improving quality with better learning resources and the cost will go up.

CUT COSTS

Try cutting costs and you will endanger both access and quality.

TRIANGLE AN INSIDIOUS

This iron triangle has hindered the expansion of education throughout history. It has created in the public mind an insidious link between quality and exclusivity. This link still drives the admission policies of some universities, which define their quality by the people they exclude.

TRIANGLE 2

But today there is good news. Thanks to globalisation successive waves of technology are sweeping the world – and technology can transform the iron triangle into a flexible triangle.

CHALLENGE

By using technology you can achieve wider access, higher quality and lower cost *all at the same time.* This is a revolution – it has never happened before.

FUNDAMENTAL PRINCIPLES

How does it work? The fundamental principles of technology, articulated two centuries ago by the economist Adam Smith, are division of labour, specialisation, economies of scale, and the use of machines and information and communications technology.

These principles have been applied successfully to higher education by the distance teaching institutions, often called open universities.

OPEN UNIVERSITY 170,000 PLUS

I give the example of the UK Open University, which I had the honour to head for 11 years, as an institution that has stretched the iron triangle. Over two million learners have taken modules, certificates, diplomas, degrees, higher apprenticeships, Masters degrees and doctorates since its foundation. Today with over 170,000 students and 13 million learners visiting OpenLearn, its free online course platform, the UKOU has dramatically widened access.

QUALITY ASSESSMENT

It also offers high quality. England's Teaching Quality Assessment system ranked the Open University 5th out of 100 universities and it topped government surveys of student satisfaction for several years running.

LOWER COSTS

All this while operating at lower costs per student or per graduate than conventional universities.

So what is the secret of doing open, distance and online learning so successfully?

The Three-Legged Stool

THREE-LEGGED STOOL

This brings me to my second conceptual trio, the three-legged stool.

Think of the student learning online as seated on a three-legged stool. The three legs are:

1. Good learning materials: for both synchronous and asynchronous use.
2. Student support: academic, administrative, cultural and social.
3. Efficient administration and logistics.

A stool requires all three legs to support the weight put on it. By analogy, online education only works if all three functions are performed well. If any leg cannot support the weight the student may fall – that is to say fail.

LEARNING MATERIALS

In this year's rapid transitions to online learning, most effort was invested in learning materials. Professors concentrated on putting their classroom lectures online for synchronous delivery.

Good learning materials are, of course, vital to successful distance learning. But also, good materials that students can work on **asynchronously** are a vital complement to **synchronous** online lectures. I'll come back to this when we get to my two dyads.

But right now, to complete part one of this webinar, I shall focus on the other two legs of the stool.

ACSENDA TRANSITION

During the scramble to go online when COVID-19 hit, I saw how a small, private HEI in Vancouver, the Acsenda School of Management, made the transition successfully. It went well because, although the learning material was mostly synchronous Zoom presentations, Acsenda also gave intense attention to Student Support and to Administration and Logistics.

You can find details about Acsenda's successful transition and the leadership challenges behind it in the publications and presentations on my website.

Student Support

STUDENT SUPPORT

So what about Student Support?

Students need support that goes beyond their online group sessions with the professor. Four areas for support are: academic, administrative, cultural and social.

STUDENT SUPPORT 4 ELEMENTS

Clearly, to be successful students must engage with the **academic** content of their courses. Many require more help than they get in the formal online classes. Their first need is for opportunities to ask questions and demonstrate their understanding of concepts. This can be done by the instructor in one-on-one or small-group online sessions. For a large class it is probably done better by part-time tutors hired and trained specifically for the support function.

The second area is **administration.** When they are on campus, students can usually resolve issues about timetables, programme requirements, and so on by going to the relevant office. When everyone is off campus this support must be provided through clear information on websites, a friendly helpline, regular e-mail updates, and quick and accurate replies to a large volume of e-mail.

Then there is **cultural** support. Undergraduate students, in particular, look to their campus for exciting cultural activities to meet other students. On campus these often happen informally, but a PSI operating online has to organise them, which means using technology to offer events such as trivia quizzes, music nights and debates. At Acsenda the student ambassadors, who are specially chosen high-performing senior students, organised some very successful cultural events.

Finally, there is **social** support. Online study and confinement during lockdowns can be lonely, particularly for new students. They need opportunities to meet each other, if only virtually, and to talk about any personal issues that worry them. Each PSI has to decide where to draw the line between the providing social support itself and making referrals to official psychological and counselling services that some countries provide through the state or voluntary organisations. PSIs should beware of taking responsibility for student issues that should properly be dealt with by state social services or by the police.

Administration and Logistics

ADMINISTRATION AND LOGISTICS

The third leg of the stool is administration and logistics.

ADMINISTRATION & LOGISTICS LIST

Some of this will be provided by the **learning management system**, which must be as user-friendly as possible.

For the **online classes** Acsenda trained faculty to use both Zoom and BigBlueButton. It was good to have two options because in the early days of 'crashing into online learning' there was so much pressure on these platforms from PSIs worldwide that they did indeed crash. Most Acsenda teachers preferred Zoom but it was good to have a back-up. Nothing puts students off distance education faster than systems that don't work, because it makes them feel totally helpless.

Effective online operations depend on having an efficient **registry** with student management policies that have been translated into smoothly working procedures. This means user-friendly IT systems but also **telephone helplines** for students with problems that they may prefer to discuss with a real person. Expect the use of e-mail to explode!

THREE-LEGGED STOOL

So that is the three-legged stool of distance education. Let me pause there for comments, objections and questions.

PAUSE FOR DISCUSSION

PAUSE FOR DISCUSSION

 PART TWO DYADS

I now move to my two dyads, Independence and Interaction and Synchronicity and Asynchronicity. These are obviously related, as we shall see, but I think it's useful to distinguish between them.

I start with Independence and Interaction.

SIR GEORGE WILLIAMS

At the beginning of my career, as I mentioned, while I was teaching at the École Polytechnique of the Université de Montréal, I enrolled in a part-time Master's course in Educational Technology at what was then Sir George Williams University. The whole experience was very formative and enlightening, but the highlight was the three-month internship that the programme required. This was a life-changing experience.

UKOU 1972

I spent it at the UK Open University, then in its second year of operation but already enrolling 40,000 students. By the time I re-joined it as vice-chancellor, 18 years later, it had 100,000 students and when I left there to go to UNESCO in 2001 the numbers had grown to 200,000. You will understand why I believe that distance learning and scale go together naturally!

OPEN TO PEOPLE, PLACES, METHODS, IDEAS

But the real issue is access. The UKOU was launched with the slogan 'open to people, open to places, open to methods, and open to ideas'.

What was really radical in the UK of those days was that the UKOU interpreted 'open to people' to mean having no academic prerequisites for admission. You had to be over 21 years old but apart from that admission was on the basis of 'first come, first served' up to the capacity that the university could cope with. The civil servants in London, cautious as always and terrified of this radical innovation, had recommended to the first vice-chancellor, Walter Perry, that he start with a pilot project of 300 students to test the concept.

PERRY 25,000

Perry, knowing that the success of the Open University would depend on economies of scale and the high quality offerings that scale permitted, ignored the civil servants and admitted a first class of 25,000 – and another 15,000 the following year.

ELONGATED TRIANGLE

This is the Iron Triangle at work. Technology makes it possible to increase quality and access at lower costs if you work at scale.

Scale means wider access. But the social mission of an open university requires that it must be wider access to successful study, not just wider access to admission. Open admission attracted thousands of adult students with lots of motivation but weak academic backgrounds, often people whose bad memories of school made them very nervous about undertaking higher education.

So what did the UKOU do to help thousands of learners overcome their fears of failure and achieve success? How did the UKOU implement the three-legged school?

OU-BBC PARTNERSHIP

At the time of its creation in the 1970s, the UKOU was most famous for its partnership with the BBC, which put out course-related TV and radio programmes on its regular channels. This led to jokes about 'earning a degree by watching the telly'. In fact these programmes represented only a small part of the teaching/learning system. They also gave the impression that the UKOU was all about one-way teaching for independent learners.

BLUE PLANET

Today the UKOU-BBC partnership continues but focuses on blockbuster general programming for a global audience. Since the 1970s the arrival of computers and the internet have provided the UKOU with many ways of reaching students.

It understood from the beginning that many of the learners who came through its open doors would require plenty of interaction with teachers and other students in order to succeed.

TUTORIALS

It made large investments in providing a part-time tutor for each group of 25 students and renting study centres all over the country where these tutors could organise optional tutorial sessions and interact with the students who wished to attend. The tutors also commented extensively on the students' assignments when they marked them, with staff on the main campus monitoring the quality and helpfulness of the commentary and the appropriateness of the marking. You can imagine that this is a massive operation. At the time I left the UKOU we had close to 10,000 tutors, whom we called associate lecturers, working for us in this vital function.

INDEPENDENCE AND INTERACTION

I've given just two examples of components of distance learning. TV and radio programmes allow students to learn independently. Face-to-face meetings between students and tutors are opportunities to learn through interaction with others. In talking about the three-legged stool I

listed various other functions that are necessary in for an effective online and distance learning system that can foster student success. Each of these activities can be situated somewhere on the spectrum between independence and interaction.

GETTING THE MIXTURE RIGHT

Designing a good learning system means creating a judicious mixture of independent and interactive activities. The mix will depend on the media and facilities that you have available but also on your resources. A simple rule of thumb is that, if you have lots of students, independent activities, such as TV and audio programmes and working on websites have much lower unit costs than interactive activities with other people. But most students require both, which is why you need a balance.

INTERACTION A SLIPPERY CONCEPT

We can return to this in discussion because interaction is a very slippery concept and I've passed over it rather quickly.

BORJE HOLMBERG

The great scholar of correspondence education, Borje Holmberg, called it 'a guided didactic conversation'. It was easy in his time to distinguish between the independent activity of studying correspondence texts and interacting with the tutor by submitting an assignment by post and getting it back sometime later with their comments. Today some would reserve the term 'interaction' for exchanges that are immediate and in real time. To give another example, do you consider that an automated telephone response system is interactive? What about websites with frequently asked questions?

Rather than getting too picky about how you prefer to define interaction I suggest you focus on two things: the cost of providing the activity and its effectiveness for the learner. It's said that beauty is in the eye of the beholder. By analogy, the best judge of whether any learning event is interactive is whether the student judges it to be interactive. Whether their questions get answers specific to them and, in particular, whether commentaries on their assignments indicate that another human being has engaged with their work.

DYADS

My second dyad, which is the distinction between synchronous and asynchronous activities, is a useful complement to independence and interaction.

I find it interesting to compare two manifestations of online learning using this yardstick.

CAMBRIDGE

I recalled earlier Tony Bates' comment that earlier this year PSIs around the world 'crashed into online learning'. Most of this, which might better be called emergency remote teaching, consisted of instructors giving their previous classroom lectures online, through Zoom and suchlike, in a synchronous fashion - what we also call 'real time'. It wasn't great but it seemed to

work, especially if institutions took the other two legs of the three-legged stool seriously and provided good student support and logistics.

MOOCS

That's one manifestation of online learning. The second is MOOCs (Massive Open Online Courses). These created a sensation with the news media when they first appeared a decade ago. As often happens with innovations in educational technology they were over-hyped and misunderstood. Some newspaper articles said it was the end of higher education as we knew it. A few star professors would displace most of the world's faculty and people would learn from home.

In the event, not much in traditional higher education seemed to change, although millions of people now take MOOCs. I've done 20 myself and could only take them because they are offered asynchronously. I can do them when I want to and study at the pace that suits me.

OPENLEARN

COVID-19 has given a terrific boost to asynchronous free online courses. In the UK one in seven adults started one this year, including 32 per cent of those who had been made redundant, 20 per cent of those who had been furloughed and 22 per cent of 18 to 44 year-olds.

The UKOU's OpenLearn platform hosts almost a thousand free on-line courses and in the past year has seen a record 13.6 million visitors, up from 8.9 million the year before.

INDEPENDENCE & INTERACTION; SYNCHRONICITY & ASYNCHRONICITY

It's time to stop for our second period of discussion and comment. As we move out of the first stage of the educational response to COVID-19, when we 'crashed into online learning', and into the second – the new normal, whatever that will be – these pairs of concepts, independence and interaction and synchronicity and asynchronicity, are particularly important.

Increasing access to education means allowing learners to so some of their study independently, which usually means materials that can be used asynchronously. But making that education effective, for most people, means giving them opportunities for interaction with other people, sometimes, although not always, synchronously.

I look forward to your questions and comments.

PAUSE FOR DISCUSSION

PAUSE FOR DISCUSSION

THANK YOU