It is a pleasure to speak to you again.

Yesterday in remarks prepared with my colleague Professor Asha Kanwar of COL and my UNESCO colleague Stamenka Uvalić-Trumbić we stressed the important role of the private sector in higher education in general and higher distance learning in particular. We ended those remarks by noting that although it is, in principle, easier to achieve good and consistent educational quality through distance learning than through face-to-face instruction, the distance education sector still suffers from a reputation for poor quality in some countries.

Today we want to launch our interactive session with some brief and simple remarks about achieving quality in distance education.

First, let me give you an example of a situation where state authorities have recognised through their assessment processes that distance education is of higher quality than most conventional instruction.

This slide shows the results of the assessments of teaching quality that were carried out in the UK from 1995 to 2004. At that point teaching quality assessments by discipline were discontinued because they were too unpopular with those institutions that didn't come out well. This table aggregates the results of all assessments to that point and you can see that the Open University, Britain’s large distance teaching university, comes out in fifth place out of one hundred universities, just above my own alma mater, Oxford.

Second, and even more surprisingly to some, the Open University has come out top, two years running, in a national survey of student satisfaction involving tens of thousands of students that only started two years ago.
What is the secret of achieving quality such as this in distance learning?

The important point to make is that there is no secret. Let us try to demystify quality in distance learning with a simple guide.

**Distance learning and remote-classroom teaching**

We begin by distinguishing two approaches to distance education.

The first is called remote-classroom teaching and used to be popular in the United States. The idea is that you link a teacher through an audio or a video telecommunications link to students in a series of remote classrooms. This allows a teacher to reach a larger number of students spread over a wide area. If the equipment is well designed and the instructor well trained useful interaction can take place between the students and the teacher.

However, I shall not talk further about this approach because it has several problems. First, it tends to be expensive, because of the telecommunications links. Second, you can't scale it up beyond a limited number of remote classrooms. Third, it still requires students to be in the classroom at a set time, so it does not give much flexibility.

We do not wish to dismiss this out of hand, especially in a country like India that is well-endowed with educational satellite channels, but we shall focus instead on the second approach to distance education, which we call distance learning. The aim here is to take to the individual learner, at home, at work, or travelling, whatever is necessary for effective and enjoyable study.

There are three ingredients, so you can think of distance learning as a student sitting on a three-legged stool.

The first leg is good study materials. Today you can use lots of media for this, audio, video, print, the Web, CDs and DVDs, the Internet and so on.

The second leg is good student support. Most students cannot succeed on independent study alone. They need support from teachers or tutors or other students. Some of this can be provided by phone, e-mail or correspondence. Sometimes students get together physically in local groups.

The third leg is good logistics. Study materials are no use unless they reach the students. Examinations must be administered, supervised and marked. Often these operations have to be carried out on large scale - yesterday I mentioned the mega-universities with over 100,000 students. If you operate on that scale even an administrative error that affects only 1% of students means more than a thousand unhappy students.

So far I have presented distance learning as a matter of convenience for part time students, but it is much more than that. Let me explain. Governments want education to meet three criteria. They want it to be accessible to large numbers, they want to keep the cost as low as possible, and they want education of quality.
I put these vectors together in what I call the iron triangle. Iron; because until recently it is been a severe constraint - a straitjacket - on the expansion of education. That is because, with traditional classroom teaching, it is hard to change any side of the triangle for the better without making the others worse. Put more students in class to increase access and people will say quality is going down. You may have heard the cry 'more means worse'.

Reduce investment in education to cut cost and you may reduce access and quality. Invest in quality through better teachers or materials and costs will go up. These trade-offs have reduced access to education throughout history.

Distance learning is revolutionary because it recasts the iron triangle. It allows you to increase access, increase quality and cut costs - all at the same time. This has never happened in education before.

How does distance learning do this? The key is the use of media for study materials and the economies of scale that this gives you. Even with old media, such as print and books, it costs little to produce the thousandth or ten-thousandth copy. It costs almost nothing for an extra person to tune into a radio or TV broadcast or to visit a website. Copying CDs and DVDs is also cheap.

This also promotes quality. If you are going to sell a lot of copies of a book or a DVD you can afford to invest in making them of high quality. This is what allows the mega-universities to serve tens of thousands of students with high quality learning at low cost.

However, as I said earlier, students do not live by study materials alone. They need human support. This is inherently more costly because more students mean more tutors. But if you use the good industrial principles of specialisation and division of labour you can get those costs down too.

The same applies to the third leg of the stool, logistics. A large-scale computer based warehousing operation will usually be more effective as well as more efficient, than a cottage industry approach.

Let me illustrate this with reference to the mega-university that I know best, which is the UK's Open University. This has around 200,000 students and, when cost comparisons were last done, operated at between 60% and 80% of the cost per graduate of a conventional UK university. Of special interest here is the reputation for quality that the Open University has achieved as I mentioned earlier and show the slide again because it always seems to intrigue people.

Furthermore two recent annual surveys of 170,000 students across all UK universities put the Open University in first place for student satisfaction. That may seem remarkable for students learning at a distance. What it means is that the Open University does a first-rate job on each of the three legs of the stool: materials, support and logistics.

Cross-border partnerships

I should also mention that the UK Open University has become an important player in a new development of great importance called Open Educational Resources. These are teaching and learning materials that
are made freely available in electronic form so that you can adapt them for your own use provided that you put your new version back into the common electronic space.

The Open Educational Resources movement gained momentum when the Massachusetts Institute of Technology put the lecture notes of its faculty on the web. The fact that the UK Open University is now going to make a large volume of self instructional materials available for general use is another major step forward that creates an even more favourable environment for new initiatives. At COL we are helping the small states of the Commonwealth to build up their tertiary education systems by developing OERs.

By making use of good materials that are freely available institutions such as yours should be able to cut the cost of materials development and be able to invest more in student support.

Our final words will be about student support. This is a very important leg of our three-legged stool but it is important to try to understand what makes the most difference to student satisfaction and performance. Whenever a learning system shows weaknesses the temptation is to put in more 'interaction'; but what do we mean by this?

Last week I heard a most interesting presentation by Professor Bob Bernard of the Educational Technology group at Concordia University, Montreal, where I obtained my own degree in that discipline. He and his colleagues have carried out a meta-analysis of hundreds of studies in which distance education students were treated in different ways. They distinguished three types of interaction: student - content; student - student; and student - teacher. They then analysed all the studies to find which type of interaction made the greatest difference when it was increased.

The results were very clear. Increasing student - content interaction had much the greatest effect; with student - student interaction coming next and student - teacher interaction last.

This may be disappointing for teachers but it is really not very surprising. Students want to understand and succeed, and engaging more effectively with the content is the best route to that. I suppose that this result should also encourage us to explore new applications of technology that increase engagement with the content, but that is the subject for another whole talk.

Conclusion

Let us conclude with a few simple statements.

First, distance learning is revolutionary because it breaks open the iron triangle and allows you to increase access, improve quality and cut costs - all at the same time. This has never happened in education before.

Second, thinking of the distance learning student as sitting on a three-legged stool is a helpful way of designing quality into your system. If any of the three legs is too weak the student will fall. So pay attention to materials, support and logistics. You cannot afford to neglect any of them.

If you want to see a highly contemporary system which draws on ICTs and a range of technology to make
each leg of the stool strong you do not need to go outside this building. It seems to me that the Symbiosis Centre for Distance Learning is exemplary in each of the three areas. Its Editorial Services keep a close watch on the quality of the learning materials. Its Care Centre is a model of the use of ICT to support students. Its Call Centre and Despatch Facilities address the logistics of distance learning in a very modern manner.

Finally, when it comes to strengthening student support, remember that interaction is a slippery word. You might want to reflect, given the results of Professor Bob Bernard's study, on how to make students engage with the course content more effectively since that seems to have the biggest impact on improving the quality of the learning system.

It has been a privilege to address you and now I open these topics up for discussion.

Reference