Quality vs Quantity: Can Technology help?

Opening Keynote, 25th ICDE World Conference, Tianjin, China, October 16, 2013

By Professor Asha Kanwar
Commonwealth of Learning

Transcript

Distinguished Colleagues, Ladies and Gentlemen

When I presented a paper at the 15th ICDE World Conference held in Venezuela over twenty years ago, I could never have imagined that I would be standing before you to deliver a keynote address. It has been a long journey and I'm very grateful to the organisers for this great honour. I was asked to address the sub-theme, 'Quality in ODL' and my topic today is 'Quality vs Quantity: Can Technology Help?'

The three key words in my presentation are Quantity, Quality and Technology. After a brief review of the context of HE today, I will look at the trends in QA in Higher Education in the last decade and review how Open and Distance Learning has developed its own quality systems. I will then focus on two emerging areas, OER and MOOCs, which will require new perspectives on quality. Finally, I will suggest some of the ways in which technology can help us achieve both quality and quantity.

But first the context. In the previous decade we have seen an unprecedented demand for higher education. In 2007, there were 150 million tertiary students globally, a 53% increase over 2000. We find that the number has increased to 165 million in 2012 with an estimate that this is expected to rise to 263 million in 2025.

What does this mean in real terms? If we are to accommodate the children who will reach enrolment age between now and 2025, we will need to build four universities with a capacity of 30,000 every single week

In spite of this huge expansion in Higher Education, the APRs in the developing world are far below those in the OECD countries. For example, in South Asia, the APRs remain at about 15% and in sub Saharan Africa the percentage drops to below 10.

This rising demand for HE has given rise to a range of new types of providers—private, cross-border, online and distance education institutions.

Let us look at the growth of open universities in the Commonwealth. In 1988, when COL began its operations, there were only 10 open universities in the Commonwealth—3 in Canada and only one in Africa, that is UNISA.

Twenty five years later, that is in 2012, the number of open universities in the Commonwealth increased to 28. You can see that only one remained in Canada, the other two having merged with campus universities to become dual-mode.

On the other hand, the growth has been phenomenal in developing countries as governments struggle to increase access to higher education. Nigeria, Tanzania and Zambia all established open universities during this time. The Open University of Mauritius is the most recently established institution with others being planned in Botswana, Namibia and Kenya. The next wave of open universities will be in Africa.

However, for the moment, Asia has over 70 open universities, 13 of which are mega universities. China has a long tradition of distance education offered through its China Radio and TV Universities and Open Universities.

In addition, there is an increasing trend towards online learning. In 2010, 6.1 million students were taking at least one online course accounting for 31% of all US Higher Education students. This Slide gives you an idea of this increasing trend. As technologies become more accessible both developing and developed countries will move towards more online and distance provision.

While the aggregate growth rate is 7.6%, interestingly, the highest growth rate is in **Asia** at 17.3%. **Vietnam**, Malaysia, **Thailand**,**Philippines**, and **China**, are five of the ten top countries with the highest eLearning growth rates.

Private provision has been the fastest growing sector, accounting for nearly 46% of all tertiary enrolments globally.

The Democratic Republic of Congo, South Korea and Chile account for the largest presence of private provision.

In the decade starting in 2000, the number of international students has grown from 2 to 3.6 million, an increase of nearly 80%.

Not surprisingly, the top three destinations are US, followed by the UK and Australia. The top three countries sending students abroad are China, India and South Korea, with China contributing nearly half of the overall numbers.

In addition, the costs of HE have risen exponentially. An article in *The Economist* asks whether higher education is still worth it? The costs of higher education have risen way above inflation rates in the past three decades, making HE increasingly unaffordable. This may be the American situation but quality HE is still beyond the reach of many in the developing world.

Government funding for HE has increased globally. In the US, federal funding for HE has grown from $56 billion in 2000 to $153 billion in 2010, a threefold increase when the number of students grew by only 33%. This is prompting policy makers to seek more accountability and value for money in the US.

At the Time Summit on Higher Education last month, the US Secretary of Education, Arne Duncan called for more accountability through the development of a university ratings system—one factor of which would be the earning power of an institution's graduates. So we note that as both the demand and costs increase, there will be an increased need for quality in higher education.

Do we know how much our graduates earn?

How has the emergence of different types of providers influenced QA policy and practice in the past decade?

Let me take two major UNESCO events—the World Conferences on Higher Education in which the global community adopted key declarations. If we go back to the World Conference on HE organized by UNESCO in 1998 and look at the Declaration, we note that there are some references to the 'enhancement and preservation of quality in teaching' but there is no reference to quality assurance.

However, when we look at the Communique that was adopted by the 2009 World Conference on Higher Education, we find frequent references to quality assurance throughout the text. The members note that 'quality requires both establishing quality assurance systems…as well as promoting a quality culture within institutions.' We seem to have moved from quality to 'quality assurance' and 'cultures of quality'.

National QA systems flourished across the world—spreading to 117 countries in the 2010's as compared to the 65 in the 1990's (Eaton, 2012).

Judith Eaton, the President of the Council for Higher Education Accreditation in the US, notes two influences on QA during this period—one, that the QA systems were developed in the Western world and these were followed by the developing world; and two, the QA systems were based on traditional HE which was primarily classroom based and faculty dominated. How can QA systems be more contextual and open to new types of HE provision?

In addition to national QA agencies, there has been a substantial increase in the number of regional and international QA networks in the last decade. The African Quality Assurance Network, the European Association for QA in Higher Education or ENQA, are some of the regional entities that now link with country-based QA systems. The increasing mobility of students across borders and the growth of online learning will further strengthen international QA initiatives.

Another development supporting student mobility is the number of Qualifications Frameworks which have been developed in over 70 countries. For example, Europe has both national and regional frameworks. Australia, Hong Kong and New Zealand have national frameworks. (Eaton, 2012)

In the past decade, we have witnessed the growing prominence of rankings, a hierarchical comparison of the effectiveness of different institutions according to specific indicators. More than 50 countries use rankings and there are 10 international and some regional rankings (Eaton, 2012).

The past decade has witnessed the increased emphasis on outcomes. The Association of American Colleges and Universities summarized the essential learning outcomes for college graduates and these can be adopted and adapted by institutions. The OECD's Assessment of Higher Learning Outcomes (AHELO) can be used by countries to test generic and discipline based skills.

To sum up, we have seen a move towards greater accountability and regulation. There is an increasing trend towards the regionalization and internationalization of QA; a focus on outcomes—for institutions as well as for students. There are more tools available now than ever before, to measure outcomes, rankings, and to compare different institutions.

Do we see an improvement in the quality of higher education? A 2011 study found that 36% of college graduates in the US did not show any significant cognitive gains over four years and that half the employers surveyed said they had trouble finding suitable graduates to hire.

What more do we need to do?

Let us now look at how QA has developed in ODL institutions across the Commonwealth.

There was no discussion of QA when the first open universities were set up. The discussion in the 1960's and 70's referred to 'standards' which Roger Mills defines as 'objective measurable, outcomes. [1] What then were the criteria used to measure standards? As Koul sums up, these were i) 'process of course preparation and the quality of study materials' ; ii) 'feedback and interactivity in the guise of counseling, tutorials, assignments' and iii) 'usability of ODL for the subject concerned'[2]. The reference point was the conventional system where high standards were upheld in terms of well-qualified faculty and facilities.

The nineties became the decade when quality dominated discussions of ODL. The discussion shifted very quickly from developing QA systems in distance education in developed countries (Australia, UK, New Zealand, Canada) to how these could be adapted to different developing contexts (India, Hong Kong, for example).

In this present decade the emphasis has shifted to the integration of both external and internal QA measures so that institutions develop 'cultures of quality'. Let us look at some models that ODL institutions have adopted.

The Open University of Malaysia, has got an ISO 9001: 2000 certification and is also accredited by the Malaysia National Accreditation Board.

The model in this case reflects an attempt at constantly trying to improve its processes through internal and external quality assurance measures, in relation to national as well as international standards

Institutions such as The Open University in the UK and IGNOU comply with standards set by the national bodies namely the QA Agency in the UK and the Distance Education Council of India respectively.

Some institutions have developed their own QA policies such as the Open University of Sri Lanka (OUSL). The Open University of Sri Lanka was assessed successfully by the University Grants Commission based on the same criteria as in the case of the 14 conventional universities in the country. However, the Senate and the Council of OUSL believed that this did not take into consideration the specific features that characterize ODL. To fill this gap, OUSL developed a QA framework for ODL.

Here is an example of an open university taking the lead in developing standards and quality measures that would be applicable at the national level and cover the over 25 providers of distance education in the country.

QA is not restricted to well-endowed institutions alone. Kyambogo Teacher Training College in Uganda complements its distance education provision through face to face tutorials on weekends. If a student does not come for two consecutive sessions, the tutor gets on his/her bicycle and travels miles to the student's house to find out what is the problem. This culture of care is synonymous with the culture of quality in the institution.

As the 2009 UNESCO Communique indicates, in the past decade the emphasis has shifted to the integration of both external and internal QA measures so that institutions are encouraged to develop 'cultures of quality', the subject of a book published by COL in 2006.

Prof Koul and I were the editors and we described the culture of quality as an institutional culture that promotes the introduction of an internal QA system where everyone takes ownership; values capacity building for implementing QA; stresses accountability to stakeholders and focuses more on learning rather than on instruction alone.

Paradoxically, in spite of this focus on quality, there seems to be an increasing resistance to ODL in many developing countries.

A legislation from Equador illustrates the constant struggle for recognition and 'parity of esteem' that ODL institutions continue to face. The call for no government employment for ODL graduates is surely a paradox, since most of the institutions have been established by the governments in the respective countries.

The Ethiopian government also announced a ban on all distance education institutions in the country saying that 'distance learning education is unnecessary at this stage in the development of the education sector'. This when the then Prime Minister himself was a graduate of the Open University UK. However, a happy solution was found when the ban was lifted two months later, with the introduction of a QA system.

When will the ugly duckling of ODL become a swan?

Can the new developments help? What implications do OER, MOOCs have implications for QA agencies and HE institutions?

With the rise of social media, there has been a global movement towards collaboration in the development and sharing of content and we have Open Education Resources or OER. The fundamental principle is that any materials developed with public funds should be made available free to others to use as required under an open license

But since anyone can adapt the content, who is responsible for the quality of repurposed content? How do institutions ensure the integrity of their credentials ? And what is the role of QA agencies?

For OER, quality dimensions of content such as accuracy, relevance, currency, pedagogic effectiveness in terms of learning design would apply just as they would to any content. However, areas in which OER quality measures will be different would relate to reusability and openness. Is the content accessible, even to learners with special needs; can it be localized to suit other linguistic and cultural contexts: are there any barriers related to technology such as bandwith or software requirements?

Let us now come to the second major development emerging partially out of the use of free content or OER. This is the Massive Open Online Courses or MOOCs. Started at the University of Manitoba in 2008, this has gained traction in the ivy league institutions of the United States and has resulted in major consortia of the top universities on both sides of the Atlantic: Coursera, EdX and Udacity in the US with FutureLearn led by the OUUK.

To share just one early example, Stanford University offered a free course in artificial intelligence which registered 160,000 students from nearly all countries of the world, of which 23,000 completed the course. This is a 15% pass rate. In general MOOCs have registered low pass rates of 10-15%.

A survey conducted by the Chronicle of Higher Education asked the professors running the MOOCs if they believed that students who succeed in their MOOCs deserve course credit from their institution, 72% said no. What does this say about the quality and rigour of the MOOC offerings?

But since MOOCs are offered globally and to a diversity of learners, the question is can one size fit all? What of student verification and academic integrity? Is a peer reviewed assessment acceptable? Is there a delinking of the institutions which teach and the institutions which credential? Will this result in the rise of Degree Granting Bodies?

As we view the developments of the last decade, we note that there is an increasing move from traditional ODL delivery to more digital and online provision. MOOCs were unforeseeable some years ago and we cannot anticipate the developments that will evolve in the coming years. So, will QA of the future need to provide more facilitation than regulation? Will the QA of the future seek less compliance and encourage more creativity? Do we see the focus of QA shifting from HE to lifelong learning?

Finally in which ways can technology help us to serve the imperatives of both quantity and quality? Let me suggest three areas that have been of continuing concern in ODL.

One, we know that the dropout rates in ODL are much higher than in campus institutions both in the developed and developing countries, and we can see a similar pattern in MOOCs. Here is a comparative figure of the students who go beyond one year of HE. Only 7% of full-time students leave after one year whereas there is nearly 45% non-continuation among the OU students in the UK. There are several reasons for this but the question is, how can we support students to achieve better outcomes?

Learning analytics can help us to collect and analyse data about how learning is taking place. Because of this, predictive systems can be developed to identify potential dropouts and provide the necessary support to help them overcome their difficulties. It can also highlight those areas where many students struggle so that the tutors/mentors get the feedback well in time to take remedial measures.

Learning Analytics can help create a more personalized learning experience by providing continuous and instant feedback resulting in improved outcomes.

Second, the ODL learner in the past has often been a lonely figure reflecting on content received and interacting occasionally with the tutor. With increasing access to connectivity and social media, high quality OER can supplement existing materials and provide real time interactions with both peers and tutors. The presence of young people on Facebook and You Tube have reduced the challenge of cultural gaps in online learning.

Learners have initiated study forums, quite independently of their formal instruction, and these have greatly enriched both their learning experience and extended peer networks. Here is an example of one such forum organized by the IGNOU Masters in Computer Applications students.

Third, how can the learner be involved in the quality process? With the increase in the number of QA agencies, what has been the overall impact among administrators, faculty and students? A study by Stensaker et al (2011) in Norway, shows that the most positive impact was on institutional leadership and administrative staff who felt that QA had influenced internal quality with the establishment of new routines and procedures. Academic staff were less enthusiastic but agreed that QA had a positive impact on research and staff engagement. Interestingly, the students did not know much about QA nor did they find it relevant to them.

A Canadian study which takes into account learners' perceptions of elearning quality found that students were primarily concerned about the nature of new knowledge and skills acquired, the value of the credits gained and the return on investment of money, time and energy. (Barker, 2007 in Jung and Latchem, QA and Accreditation in DE and elearning, 2012). The standards for elearning that were developed were based on what was important to the learners.

How can we involve learners and stakeholders to provide constant feedback on what they see as educational quality? Technology is providing opportunities to millions of users to rate goods and services. Popular examples are amazon.com; trip advisor and other social media spaces. User ratings for educational institutions have the potential to impact the quality of teaching and enhance the experience and outcomes of learning.

In conclusion, let us go back to the question of whether technology can help. Technology by itself is not a silver bullet that will transform the quality of education. What is needed is a combination of technology and ideology to help shift the paradigm of how we do things today. The ideology we speak of is where a learner is not a mere student but a partner in learning, where a teacher is not an instructor but a facilitator and where each learner is a life-long learner

So how will the shift take place? One when we are more flexible and open enough to embrace new provision; two, when we move beyond a purely institutional approach to include stakeholders views as well and three, when we encourage institutions to be relevant to the needs of the 21[st]century.

Thank you for your kind attention.

[1] Roger Mills, 'A Case Study of the Open University, United Kingdom' in Koul & Kanwar. (2006) *Towards a Culture of Quality*, Vancouver: COL. p.144.

[2]Koul and Kanwar. 2006. p 178.