<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation between Performance and Quality of Academic Staff in National Open University of Nigeria (NOUN)</td>
<td>Olubiyi Adeniyi Adewale, Timothy Olugbenga Ajadi &amp; Juliet O.Inegbedion</td>
<td>1-7</td>
</tr>
<tr>
<td>Benchmarking E-Learning in UK Universities: Lessons from and for the International Context</td>
<td>Paul Bacsich</td>
<td>9-17</td>
</tr>
<tr>
<td>Structural equation modelling of factors affecting success in student's performance in ODL-Programs: Extending Quality Management concepts</td>
<td>Per Bergamin, Simone Ziska &amp; Rudolf Groner</td>
<td>18-25</td>
</tr>
<tr>
<td>Quality Assurance in Open and Distance Learning in India</td>
<td>S.K. Gandhe</td>
<td>26-32</td>
</tr>
<tr>
<td>Leading innovative approaches to the financial crisis</td>
<td>Sarah Guri-Rosenblit</td>
<td>33-38</td>
</tr>
<tr>
<td>TOWARDS KNOWLEDGE BASED ECONOMIES - the contribution of open distance learning strategies in addressing equity and inclusiveness issues in small states like Mauritius.</td>
<td>Jheengut</td>
<td>39-63</td>
</tr>
<tr>
<td>New Approaches to Quality Assurance in the Changing World of Higher Education</td>
<td>María Jose Lemaitre</td>
<td>64-75</td>
</tr>
<tr>
<td>Entrepreneurship: New Challenges for Higher Education Institutions</td>
<td>Josep Lladós</td>
<td>76-87</td>
</tr>
<tr>
<td>A Psychometric Study in the Performance of Distance learners</td>
<td>Ravi K Mahajan</td>
<td>88-94</td>
</tr>
<tr>
<td>Managing Quality Assurance for Distance Learning Programs in Malaysia</td>
<td>Mohd Ismail Ramli</td>
<td>95-101</td>
</tr>
<tr>
<td>Employability and lifelong learning</td>
<td>Hazel Simmons-McDonald</td>
<td>102-113</td>
</tr>
</tbody>
</table>
CORRELATION BETWEEN PERFORMANCE AND QUALITY OF ACADEMIC STAFF IN NATIONAL OPEN UNIVERSITY OF NIGERIA (NOUN)

Adewale Olubiyi Adeniyi, National Open University of Nigeria, Nigeria
Ajadi, Timothy Olugbenga, National Open University of Nigeria, Nigeria
Inegbedion, Juliet O. National Open University of Nigeria, Nigeria

Summary

The paper aims at examining the inability of NOUN to graduate degree students despite 7 years of operation. It examined this by viewing the quality, quantity, experience and continuous development of the academic staff. A 25% sample of the academic staff was taken across the schools and using the Spearman-Rho correlation, it is established that the acute shortage of academic staff hampers performance. It is also established that only 40% of the staff have doctoral degrees and 74% are in the lower academic ranks with few older academicians to mentor them. Finally, many of the staff has little or no experience in tertiary teaching hence they are bound to make blunders. The paper ends by suggesting the following:

1. Employment of academic staff should be based on a minimum of two years experience in at least a conventional university.
2. New entrants into Open and Distance Learning (ODL) should be tutored for a minimum of six months.
3. Constant training with focus on full time staff should be encouraged.
4. Academic staff should be made to operate strictly within their specialization.
Academic staff should be encouraged to have a Ph. D.

Introduction

An open university is a university that takes care of all its prospective candidates irrespective of their academic background (Anderson, Benjamin and Fuss, 1998). The door of the university is open to all. All applicants are admitted at will and are allowed to study according to their speed. This implies that a student may choose to study longer than the minimum number of years required to graduate for a particular course. Open universities has various programmes designed to take care of various interest groups of people despite their deficiencies. It is a university that do not shut the admission door on any applicant. Candidates who have deficiencies are usually admitted on compassionate grounds such as age and experience.

Presently, all over the world, Open and Distance Education (ODE) is gaining momentum and is responding to the challenge of the exponential rise in the population of those who have been deprived of the right to education. This mode of study has been legitimately accepted as a mode of education for over 150 years (Guri-Rosenblit, 1999; Holmberg, 2001). As a worldwide phenomenon, ODE has also become an acceptable mode of education in Africa.
and particularly in Nigeria (Adekanmbi, 2004). However, the greatest challenge confronting ODE in Africa generally and Nigeria in particular is the availability of quality academic staff versed in the operations of the ODE.

**National Open University of Nigeria: A Brief Overview**

As far back as 1977, the idea of an open university has already reflected in the National Policy on Education as it states that: “maximum efforts will be made to enable those who can benefit from higher education to be given access to it. Such access may be through universities or correspondence courses, or open universities, or part-time and work study programme” (National Policy on Education, 1977). It was this policy statement that paved the way for the National Open University (NOU), the forerunner of the NOUN.

After a prolonged debate in the National Assembly, an act establishing the Open University of Nigeria was passed. The NOU was formally established on 22nd July, 1983 but before it could take off, the act was suspended via a budgetary pronouncement made by General Buhari on April 25, 1984, after the military junta took over (Blueprint, 2002). However, in 2002 another democratically elected government which had assumed power in 1999 removed the suspension and the university started with the name NOUN.

NOUN started with four schools and later added another one making five to date. The schools are: School of Arts and Social Sciences (SASS), School of Business and Human Resources Management (SBHRM), School of Education (SEDU), School of Law (SOL) and School of Science and Technology (SST). Each school is headed by a Dean who is a professor (except for SBHRM that has an Associate Professor as Dean) and various programmes are headed by Programme Leaders who are either Associate Professors or Senior Lecturers and are responsible to the Dean of their various schools. There are also Course Coordinators and Assistant Course Coordinators in the schools who are responsible for the coordination of the courses in the various programmes and they are responsible to the Programme Leaders.

**Research Problem**

NOUN is about 7 years old, all things being equal it should have had at least three sets of graduate for a 4-year programme. But this is not the case. With three sets of admissions in certificate courses, diplomas, degrees and post graduate courses since inception, it is only in January 2009 that NOUN is able to graduate only 69 students in certificate, diploma and post graduate diploma courses. This situation is worrisome to all NOUN stakeholders. If the number and period of graduation are the means through which the success of academic programmes are measured then NOUN cannot be said to be very successful. This study is to examine the likely variables responsible for this delay in the academic programmes, and thereby proffer solution to the problem.

**Research Questions**

Based on the stated problem, the following research questions are raised:

1. Is there a relationship between the quality of academic staff of NOUN and its implementation of educational programmes?
2. Does the qualification of academic staff have effect on implementation of educational programmes?
3. Is there a relationship between academic staff experience and the successful implementation of educational programmes?
4. Is there a significant difference between academic staff who had further training and those who do not in programme implementation?

Research Hypotheses

To provide answers to the stated research questions, the following hypotheses are formulated:

Ho\textsubscript{1} There is no significance relationship between the quality of academic staff in NOUN and implementation of educational programmes.

Ho\textsubscript{2} There is no significance relationship between academic staff qualification and implementation of educational programmes.

Ho\textsubscript{3} There is no significance relationship between academic staff experience and successful implementation of educational programmes.

Ho\textsubscript{4} There is no significance difference between academic staff who had further training and those who do not in the implementation of educational programmes.

Purpose of the Study

This study is designed to help elicit the actual variables responsible for the delay in the implementation of educational programmes in NOUN, and thereby proffer solution. The lack of adequate implementation of programmes is a threat to the existence of such programmes.

Significance of the Study

The findings in this study would help:

1. The NOUN management to re-strategies the implementation plan;
2. Other Open and Distance Institution to know how to avoid this kind of occurrence in their educational programmes;
3. Policy makers in taking appropriate decisions on Open and Distance Learning

Research Design

This study is based on the correlation method which is to help establish a relationship the independent variables and the dependent variable.

Population of the Study

The entire NOUN academic staff numbering 56 from the five existing schools constitutes the population for the research:

<table>
<thead>
<tr>
<th>S/N</th>
<th>SCHOOL</th>
<th>ACC-CCI</th>
<th>PL II</th>
<th>PL 1 &amp; PROF</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>SASS</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>2.</td>
<td>SBHRM</td>
<td>10</td>
<td>2</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>3.</td>
<td>SEDU</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>4.</td>
<td>SOL</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>SST</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>37</td>
<td>13</td>
<td>6</td>
<td>56</td>
</tr>
</tbody>
</table>
Sample of the Study

Stratified sampling technique was used, and from each stratum 25% of the existing population was selected, hence 4 was chosen from SASS, 3 from SEDU, 3 from SBHRM, 4 from SST and 1 from SOL. This gave a total 15.

Research Instrument

Questionnaire was designed for the sampled academic staff to elicit information on quality, quantity, experience and training. The Likert four rating scale was used; the positive response received higher score while the negative received lower score. To test these independent variables against the dependent variable, the National University Commissions (NUC) benchmark for implementation of educational programmes in the university was used. This was given a four rate score of 4, 3, 2, and 1. 4 stands at the highest and 1 the lowest.

Statistical Analysis

The Spearman Rho was the statistics used for the analysis. This was used because the study deals with ordinal data. The scores for each independent variable were correlated with the score for the dependent variable.

The correlation of academic staff quality and implementation of educational programmes shows a correlation coefficient of 0.8; that of academic staff quantity and implementation shows 0.8; academic staff experience and implementation of academic programmes is 0.7 and training with implementation of educational programmes shows 0.6. With this correlation coefficient the stated hypotheses could be interpreted.

$H_{01}$ There is no significant relationship between the quality of academic staff in NOUN and implementation of educational programmes.

The coefficient showed a positive relationship of .8 which shows a high level of relationship between the independent variable – quality of academic staff and the dependent variable – implementation of educational programmes. This is to say that $H_{01}$ is not tenable, therefore it could be said that there is a significant relationship between the quality of academic staff in NOUN and implementation of educational programmes.

$H_{02}$ There is no significant relationship between academic staff qualification and implementation of educational programmes.

This also showed a high co-efficient of .8 and implies that the qualification of an academic staff plays a vital role in his or her performance. Qualification is one major yardstick in measuring the quality of an academic staff. In this instance, $H_{02}$ is not acceptable because the result shows that there is a significant relationship between the qualification of academic staff and the implementation of educational programmes.

$H_{03}$ There is no significant relationship between academic staff experience and successful implementation of educational programmes.

The co-efficient for these variables shows .7 which again shows that there is a high relationship between the experience of academic staff and successful implementation of educational programmes. Thus the null hypothesis $H_{03}$ is rejected.
There is no significant difference between academic staff who had further training and those who do not in the implementation of educational programmes.

0.6 was the coefficient for this hypothesis testing. This implies that a difference exist between academic staff who had further training, that is, post qualification training and those who do not. Again the null hypothesis $H_0$ is rejected.

**Discussion**

From what has been obtained from the field, it could be said that the quantity of academic staff is significant in implementation of educational programmes. This implies that the problem faced by NOUN presently may have been as a result of non compliance of programme leaders/programme management ratio or course coordinator/course coordination ratio. From NOUN blueprint, a programme leader is to coordinate about 2 programmes while a course coordinator is to coordinate a maximum of 8 courses. But as of today, this is not the practice. Though NOUN has 56 academic staff members some of them are on contract or on sabbatical. The table below shows the current state of academic staff in NOUN:

**Table 2: Academic Staff Position at NOUN Showing Status of Appointment**

<table>
<thead>
<tr>
<th>S/N</th>
<th>SCHOOL</th>
<th>FULL TIME</th>
<th>CONTRACT</th>
<th>SABATICAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>SASS</td>
<td>11</td>
<td>1</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>2.</td>
<td>SBHRM</td>
<td>11</td>
<td>1</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>3.</td>
<td>SEDU</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>4.</td>
<td>SOL</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>SST</td>
<td>13</td>
<td>1</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>46</td>
<td>7</td>
<td>3</td>
<td>56</td>
</tr>
</tbody>
</table>

Looking at the staff strength vis-à-vis the number of programmes in each school would reveal the acute shortage of staff in NOUN. For example, the SASS runs 18 programmes. Thus, where she needs a minimum of nine Programme Leaders, she has only 5 (see Table 1) and the number of course coordinators in the whole school is barely enough for just for just four programmes. For the records, SEDU runs 16 programmes; SBHRM runs 22; SOL runs 2 and SST runs 12. This shortage in the number of staff required might be one of the reasons for the unavailability of course materials; which to an extent is a reflection of the performance of the academic staff. When you do not have enough academic staff, the few available are bound to be overworked, and thereby leads to low performance.

There was also a revelation that quality of academic staff has positive relationship with programme implementation. From data supplied by the respondents, some of the programmes lack specialists to control and monitor them. Some of such programmes are been coordinated by non-specialists. This should not be if implementation has to be adequately done. A programme Leader or Course coordinator cannot be efficacious outside his/her area of specialty. In this kind of situation, there are bound to be lapses in the academic staff performance. Another determinant of quality of academic staff is the possession of Ph. D in requisite field. The research reveals that only 40% of NOUN academic staff are Ph. D holders.

Experience cannot be ruled out in implementation of programmes. Staff who had conventional and open and distance teaching experience tend to be more apt with their jobs than those who do not. This reflected the $H_0$, which is to say that those who had experience had better performance. The members of the academic staff of NOUN are drawn from the conventional universities and most of them have no formal training in either distance or open and distance programmes only 2 representing 13.3% has experience in ODE while the
remaining 86.7% has no ODL experience. Apart from this, over 50% of the staff members are from the lower rank and have little or no teaching experience. Table 1 below shows the academic staff position at NOUN according to ranks reveals academic staffing at NOUN is bottom heavy. The following is the percentage at each rank:

<table>
<thead>
<tr>
<th>Position</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Course Coordinator I</td>
<td>74%</td>
</tr>
<tr>
<td>Programme Leader II</td>
<td>24%</td>
</tr>
<tr>
<td>Programme Leader I – Professor</td>
<td>12%</td>
</tr>
</tbody>
</table>

This implies that there is a dearth of leadership from seasoned academic to mentor and serve as role models for the younger ones. The younger ones are thus left to pander on their own and chart their own course for the development of the programmes and themselves.

Lastly, constant training is the life wire of a good performance. This was found in the testing for $H_0$, those who had consistent training found it easier to perform their role in the institution than those who never had further training. Working with past experience alone is not enough because things are changing world over; this therefore calls for new innovations. Again the research reveals that only 13.3% of academic staff have received any formal training in ODL since arrival at NOUN.

Suggestions and Conclusion

Based on the findings, the following are suggested:

5. Employment of academic staff should be based on a minimum of two years experience in at least a conventional university, and new entrants into the academic profession in Open and Distance Learning (ODL) should be tutored for a minimum of six months before given any major assignment without close supervision. Six months is suggested because, the person is within the system and have constant access to the happenings of ODL.

6. Constant training should be encouraged for an update. Focus should be more on full time staff and not those on contract or sabbatical.

7. Academic staff should be made to operate strictly in their area of specialization, with this there will be better performance.

8. Academic staff who do not have a Ph. D. should be encouraged to commence on such immediately with full institutional support while those currently on their Ph. D. should also be encouraged to finish on time.

References


BENCHMARKING E-LEARNING IN UK UNIVERSITIES: LESSONS FROM AND FOR THE INTERNATIONAL CONTEXT

Paul Bacsich
Matic Media Ltd and Sero Consulting Ltd, United Kingdom

Summary

Using participant-observer evaluation with documentary review, the author traces the history of the Pick&Mix benchmarking methodology in the UK programme on benchmarking e-learning up to the current day. The paper aims to show how other countries can use a similar methodology, and discusses the ranges of applicability.

The paper focusses on: benefits of an open educational methodology; refinement of criteria; issues of alignment to national government and quality agency mandates; project management approaches; making use of consortia, and how to ensure deep discussion within institutions. In particular, evidence is put forward for the restriction to around 24 criteria.

The author has been active in all four phases of the UK programme; has been an international advisor to the Australian scheme, collaborated closely with the main New Zealand expert, worked with EU projects, and analysed other schemes for their relevance to the UK. The author had a unique position in the UK programme including creating one of the leading methodologies (Pick&Mix) and updating three others, directly overseeing half the activity and being in charge of the final phase in Wales. The full range of comparative work on criteria has not been published and the conclusions on international use are new.

Introduction

This paper traces the history and features of the benchmarking methodology Pick&Mix (used throughout the UK programme on benchmarking e-learning in universities). Pick&Mix has drawn on and influenced work from the US, Australia, New Zealand and EU projects. The paper concludes by suggesting how other countries can use Pick&Mix.

Setting the scene

Benchmarking originated in the US as a response to competitive pressures in the early 1970s (Camp 1993). Gradually it took on aspects of self-analysis and comparison against industry "best practices".
The first occasion in the UK when "benchmarking" started to be used in university e-learning circles was when the Higher Education Funding Council for England (HEFCE) put it into its e-learning strategy (HEFCE 2005):

Possibly more important is for us to help individual institutions understand their own positions on e-learning, to set their aspirations and goals for embedding e-learning - and then to benchmark themselves and their progress against institutions with similar goals, and across the sector.

This led to the Higher Education Academy/JISC Benchmarking of e-learning Exercise - the Benchmarking Programme. This ran in three phases (Pilot then Phases 1 and 2) from late 2005 (Higher Education Academy 2008, 2009). For the main phases, two contractors were appointed: Observatory on Borderless Higher Education (OBHE) and Benchmarking e-Learning Associates (BELA). These phases were in turn followed by the Gwella phase in which four universities in Wales were benchmarked by BELA using Pick&Mix.

**History of Pick&Mix**

Pick&Mix was developed in early 2005 so that Manchester Business School (MBS) could benchmark e-learning against its global competitors (Bacsich 2005c). To do this required the creation of an analytic framework - created within the parameters of HEFCE (2005).

It is never easy to recapture the "Eureka moment", but the author recalls weeks of hard work, relaxing one evening, and waking up with the bare bones of the system (Bacsich 2005a). The "parents" were the CITSCAPES approach from UK Further Education (colleges) and the Quality on the Line system from US distance learning (Bacsich 2005b). Like all children there were unexpected features - the 6-level scheme, the focus on output and process, and the "realistic" style of criterion phrasing.

Criterion P01 "Adoption" is an archetypal example of a Pick&Mix criterion:

1. Innovators only.
2. Early adopters taking it [e-learning] up.
3. Early majority taking it up.
4. Late majority taking it up.
5. All taken it up except some laggards.
6. First wave embedded and universal, second wave starting.

In late 2005 Pick&Mix was adopted by the Higher Education Academy as one of the three main methodologies for the Benchmarking Pilot. Across all the phases, 24 institutions used it out of the total of 82 benchmarked. The BELA team ran Pick&Mix and three other methodologies in their part of the programme, with overlapping sub-teams, leading to fruitful cross-flow between methodologies.

There was detailed analysis of MIT90s (Bacsich 2006c) - including a review of the considerable Australian and New Zealand work (Wills 2006; Uys 2000). A decision was then made for Pick&Mix to adopt the MIT90s categories. This rapidly became the approach of Pick&Mix - to seek to incorporate best practice without compromising the initial vision.

The MIT90s work was part of the Concordance Programme (Bacsich 2006b) which carried out studies of most methodologies including the EU schemes BENVIC (Bacsich 2006a), Excellence (EADTU 2006; Bacsich 2006d) and CHIRON (2006). The main output from these studies was to extend Pick&Mix with some additional criteria e.g. from BENVIC. Originally Pick&Mix had a number of core criteria, all of which had to be analysed. However, it became
clear from the Pilot Phase onwards that new criteria were needed, but not necessarily relevant to all institutions. Thus was born the concept of supplementary criteria which institutions could choose to use in addition to the compulsory core criteria. This was one of the most popular features.

A harder task was to understand the commonalities with eMM (Marshall 2005; Marshall and Mitchell 2007), which adds a cross-cutting layer of five "dimensions" to the basic benchmarking scheme. Thus every criterion has to be scored five times, making the scoring process more time-consuming even if more thorough. Eventually, most institutions decided that this was not worth the extra work, though eight institutions did use it. In converse, it was decided that it was not useful to produce a "dimensionalised" version of Pick&Mix.

The author of Pick&Mix was the international advisor to the Australian ACODE (2007) benchmarking scheme. This had benefit in reverse also. In particular, ACODE had an interesting concept of sub-criteria, where a criterion is split into a few parts, scored separately. This had a direct effect on Pick&Mix: in the Pilot, one of the Pick&Mix criteria "Decision-making" was in reality treated by most institutions as a group of two sub-criteria: this was then split into one criterion for "Projects" (IT developments) and one for "Programmes" (courses). Similar considerations led to the split of "Quality Enhancement" out of "Quality Assurance". Thus the original 18 core criteria became 20 in summer 2006.

Key topics

Number of criteria

Pick&Mix had a founding vision that the senior management team of an institution would be involved in the final scoring of criteria so that they, not experts, "owned" the decision. Reflecting on his own knowledge of such meetings, the author concluded that the number of criteria that such a team could effectively process was around 24. This limit is often associated with the Balanced Scorecard (Kaplan and Norton 1996) and is found in implementations of this in education - e.g. the Balanced Scorecard (Becta 2007). See also Institute for Higher Education Policy (2000) for another 24-criterion scheme.

In Pick&Mix this limit was confirmed in practice. Institutions rarely add more than 4 new criteria to the core 20, and in only two cases more than 7 (Bacsich 2008a, 2009). This limit raises questions over other methodologies with more criteria - the vital element of "buy-in" from senior management cannot be obtained in the same straightforward way as with Pick&Mix.

Benefits of an open educational methodology

Pick&Mix works within a context of an "open educational methodology". Each release of the system and associated reports is placed in the public domain (via a Creative Commons license). There is also a wiki supporting a mass of benchmarking material including much on Pick&Mix (ELDDA 2008). It is rare to be this open - several other methodologies used in across the world for benchmarking e-learning do not operate in this way. Being open implies that a "scholarship of benchmarking" can more easily arise, since the methodology, underpinnings, evaluations and uses are easy to access, and users motivated to improve the system.

Refinement of criteria
Similarly, criterion statements can be "polished" over each phase of development. It is extremely hard to write good benchmarking criteria - it needs clarity without abstraction, conciseness without vagueness, etc - and there is almost no documentation to help - except Creating criteria (Bacsich 2006e).

Project management approaches

The main distinction between benchmarking methodologies used in UK higher education has emerged as between those that (1) require an up-front creation of a report which experts then analyse or (2) engage in "co-creation" of insight with a document as an end-product. All the methodologies that BELA uses are type (2) - "moderated developmental self-review" - more suited to quality enhancement. Type (1) seems the standard approach now for quality assurance.

Making use of consortia

However it has become routine for BELA to use peer review also - but of a rather different kind from that in quality assurance. Typically each benchmarking group of institutions meets around four times during its life cycle, usually rotating meetings round institutions. When there are four institutions and four meetings this model works particularly well and is called CAMEL (JISC infoNet 2008), but up to 10 can be grouped. Unlike in quality assurance the peers are not experts: the benchmarking consultants are. Group working again introduces upper limits on the complexity of the benchmarking methodology, because a key part of the approach is for each institution to give an "elevator presentation" at each meeting.

How to ensure deep discussion within institutions

Some methodologies have a two-level approach with relatively few criteria but a large number of "indicators" (detailed questions) - like ELTI (2006) and the "practices" level of eMM. The new Generator methodology (Becta 2009) for colleges in England is similar. A potential danger of these is that the process of generating answers to so many indicators becomes "ticking boxes" not discussing issues. A related danger is when benchmarking is conflated with a survey - as had to be done in the DSA study (Sero 2007) on Scottish colleges. For English colleges, Becta has decided that the benchmarking (via Generator) and the survey will remain separate activities.

Pick&Mix has always resisted the creation of a lower layer of indicators, feeling that the benefits of uniformity are outweighed by the risks of superficiality - but analysis is done at a detailed level within the institutions, for example by using staff surveys and student surveys.

Issues of alignment to national government and quality agency mandates

In most countries, the development of e-learning by institutions is seen as mainly an issue for the institutions. However, in some countries, national initiatives for e-learning have been set up: this raises the issue of how they relate to the national quality agency for the country's universities.

In the UK the Quality Assurance Agency (QAA) has a Code of practice, of which one part is "Collaborative provision and flexible and distributed learning (including e-learning)" (QAA 2004), with 23 precepts. Pick&Mix ensures that these are covered by its criteria, although it regards the precepts as indicators feeding into the Pick&Mix criteria rather than always
criteria in their own right. (Quality criteria tend to operate at a more detailed level than benchmarking criteria.)

The other type of national indicators that are relevant prescribe not the "quality" of e-learning but the "quantity" or "mode". This is the case in some of the UK - the discussion that follows applies only to England and Wales.

In England HEFCE (2005) introduced in its national e-learning strategy the 8 "Measures of Success". For example Measure A said:

ICT is commonly accepted into all aspects of the student experience of higher education, with innovation for enhancement and flexible learning, connecting areas of HE with other aspects of life and work.

In Wales the equivalent body (HEFCW 2008) introduced 22 "Indicators of Success". The English college sector had the 
Harnessing Technology Balanced Scorecard (Becta 2007) containing 19 indicators.

It used to be thought (including by the author) that the best way to align Pick&Mix to national indicators was as follows, adapted from Appendix E of (Sero 2008):

* Rewrite each indicator from the national indicators set to remove "political" and "aspirational" language elements
* Decompose each indicator into one or more "atomic" indicators. (Measure A above decomposes into four atomic indicators.)
* Rewrite each atomic indicator into criterion format with level statements.
* Adopt that criterion as a new supplementary criterion for Pick&Mix, possibly replacing some existing criterion, maybe one in the core set.

However, this approach is difficult in practice. The meaning of national indicators is often unclear and the indicators often omit key features. Moreover, the lifetime of national indicators is less than that of university planning cycles - universities want consistency.

Thus experience has taught that it is better to be informed by national indicators rather than dominated by them - one erects a "cordon sanitaire" between the benchmarking system and the national indicators. This is now the strategy for Pick&Mix, in particular for Wales.

**Internationalisation aspects**

There is a tradition of moving e-learning methodologies between countries, for example the adaptation of the "Round Table" methodology to the UK (Mistry et al 2002; JISC 2002). Lessons learned stress the importance of ensuring that both the terms and the concepts translate appropriately, quite separately from any translation of the language.

In benchmarking the main transfer has been of eMM from New Zealand to UK universities and Scottish colleges. The eMM transfer raised language issues - Adamson and Plenderleith (2008) noted that there was "need to change the language and terminology in one approach (eMM) for use in the UK HE context". Similar more substantial changes were required when adapting eMM to be used with Scottish colleges (Sero 2007).

However, a further UK complication is that there is not one vocabulary. The "old universities" and the "new universities" have different vocabularies even though they are slowly converging. The college sector has another vocabulary yet delivers an increasing amount of university-level teaching (QAA 2008). Pick&Mix copes by using a "smeared vocabulary" in its
criterion wording - the scheme notes that "An idealised model of an HEI is used to simplify the narrative" (Pick&Mix 2007).

So how does one adapt a national methodology to international use? As evidenced above, one can get practice in this within the UK. Lessons from this and the modifications to use Pick&Mix in Wales led to adjustments. Pick&Mix now has a generic version called ELDDA (2008). Then the generic version is instantiated into a particular country and sector - with appropriate changes in vocabulary.

It is also likely that the specific set of core criteria will change. However, it is believed that there would still be some "common core" of criteria, perhaps around ten, that would always be relevant to Pick&Mix in any country. For example, only a few countries take seriously the issue of costs in e-learning, yet two whole core criteria are devoted to it in the UK (Pick&Mix) version of ELDDA. Yet many other core criteria are not usually challenged.

There is confirmatory evidence from the Re.ViCa (2009) project. A group of international experts have been looking at the Pick&Mix criteria from the point of view of relevance to critical success factors for e-learning - in that set only 10 of the core criteria were specified as vital. This list generated impassioned debate with very different views from different countries. Interestingly some issues which in the UK are seen as very important such as marketing and costs were seen as much less important by some other delegates - on the other hand there seemed to be more agreement on fundamentals of pedagogy, technology and strategy.

Conclusion

Pick&Mix is a methodology used for benchmarking e-learning in UK universities on a wide scale. It is still under active development - including adapting it to benchmark distance learning - in the DUCKLING project (Salmon et al 2008) - and to include further output measures (Bacsich et al 2009). It has benefited from substantial input from outside the UK higher education sector and has begun to influence developments outside the UK.

The most natural set of countries where Pick&Mix could be applied in the near future are those with:

* a critical mass of existing e-learning implementations
* a funding approach where "funding follows the student" rather than fixed grants to institutions
* a blend of competition plus collaboration between institutions.

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Abstract
Learning using e-learning methods is often said to be cheaper, more efficient and flexible (Aufenanger, 1999; Kerres, 2000). So what does actually mean the term ‘flexibility’ in the context of learning and e-learning? How can the relationship between flexibility in learning and learning performance be described? According to Schiefele (2005) we have developed a model which allows first of all postulating a relationship between learning strategies, flexibility of learning and other variables. In a first step we created an instrument in form of a questionnaire to bring up empiric evidence of which factors flexibility of learning environments consists. The results showed three categories flexibility of time, flexibility of teacher contact and flexibility regarding the content. Together with other variables of the postulated model it is possible to create data which allows the enhancement of the quality management of learning environments within four scopes: (1) by giving the students feedback and advice to initiate reflexion to their learning strategies, (2) by sensitize tutors towards the learning patterns used by the students, (3) by using the results for the training of tutors and advice for learners and (4) by also using them for adaptations of the learning environment.

1. Learning strategies and learning performance
Models of learning strategies open the opportunity to formulate statements about the relationships between learning patterns and success in learning performance. On a general level, a distinction of three groups of learning strategies is often used: cognitive, meta-cognitive and resource based learning strategies (Wild, 2000). Due to the greater amount of control and more flexibility of learning resources in time and space (Bergamin & Brunner-Amacker, 2007) we propose for university ODL Scenarios that learning strategies which concern meta-cognitive control and the “management” of internal resources lead to higher correlations to successful learning performance compared to cognitive or resource based learning strategies.

In our model which serves to predict learning performance we consider that besides the learning strategies and perceived flexibility, also other variables have to be taken in account. Figure 1 shows the model. In contrary to the registration of specific current learning strategies the habitual learning strategies are mainly recorded by questionnaires (Metzger et al., 1995; Wild & Schiefele, 1994). Experimental studies often report that adequate correlations are not found or are showing relative low coherence (Artelt, 1999; Schiefele, 2005). This does not mean that habitual learning strategies are not relevant to predict learning performance but that the findings of experimental studies could not directly be transferred to real learning settings.
We assume like others that the reasons for the low coherence could be allocated on the one hand in the validity and/or reliability of measuring learning performance but also on the other hand to in the research setting not considering variables which affect the relationship between learning strategies and learning performance (Boerner, Seeber, Keller & Beinborn, 2005). For instance Artelt (1999) and Schiefle (2005) point out that the use of research designs which are close to the observation of behaviour lead to higher coherence. In our view less the coherence between learning strategies and learning performance should be put into question than the operationalisation of these two concepts (Tiaden, 2006).

Due to the lack of empiric research the effect of the perception of flexibility of the learning environment to the learning performance is not yet clarified even unknown. Therefore we propose explorative studies based on the method of structural equation modelling (SEM) to bring up some clarification. But before doing this we have to develop an instrument to record flexibility of learning processes. Therefore the main part of this article refers to the retrieval of perceived flexibility as a variable that affects learning performance (see chapter 3). Other possible determining factors will be discussed in chapter 4.

![Figure 1: Model to predict learning performance](image)

2. Methodological Approach

The development of the instrument resp. questionnaire to record the perceived flexibility is based on a research design of factor analysis. Based on a principal component analysis (PCA) with a varimax rotation we conducted an explorative search to find a structure of factors, which allows an interpretation regarding theoretical assumptions. The internal consistency of the scales we have found, were assessed by an item analysis and indicated by Cronbach’s Alpha. In the next steps which cannot be referred yet, there should follow an examination of the impact of the single components to each other based on structural equation modelling (SEM) as already mentioned above. The method of SEM compared to method of multiple regression allows through different forms of trials to vary causal structures. Thus there could be assigned some methodological advantages to use of SEM in the present situation. Due to already referred findings on the coherence of learning strategies and learning performance there should also taken in account that some variables assumed in our model could also not stand in a direct interrelationship to the learning performance but can interact as an mediator or moderator.
3. Flexibility of the learning environment as a factor

There are several authors postulating flexibility in time and space as advantages of e-learning compared to environments based on traditional learning methods (Seufert & Mayr, 2002). Although Schulmeister (2006) is not using the term of flexibility he mentions some qualities of e-learning which are seen by others as factors of flexibility by postulating that is possible to overcome four barriers by using e-learning: time, space, analogue to digital and norms (esp. the depersonalisation of mass education in higher education).

a. Record of the perceived flexibility of learning environments

In the literature one can find numerous and different concepts of flexibility of learning (Van den Brande, 1994). Garrick und Jakupce point out: “Flexible learning is a complex concept and is difficult to define. Neither individuals nor organisations have yet been able to define this term from any one specific vantage point” (p. 3). For instance on the one hand Collis, Vingerhoets & Moonen (1997) list 19 dimensions of flexibility grouped into five categories on the other hand Van den Brande (1994) postulates only three categories without dimensions. This simple comparison shows already the diversity of the flexibility concepts. We will not go deeper into the discussion of differences but point out our approach. In our perspective dimensions are several facets of flexibility that can be combined to categories regarding theoretical assumptions. One can say that according to this conception categories of flexibility are cluster of the various dimensions. In our own theoretical research we have found 22 dimensions which can be clustered to seven Categories. Table 1 gives an overview of the different elements:

| Table 1: categories and dimensions of the flexibility |
|---------------------------------|-----------------------------------------------|
| categories | dimensions |
| time | - time of learning  
- duration of learning  
- teaching time  
- pace of learning |
| space | - delocalisation |
| methods | - learning place  
- learning material  
- language |
| learning styles | - individual work vs. group work  
- on campus study, online-study, self-study  
- learning strategies |
| content | - choice of topics  
- orientation of topics (theoretical, practical)  
- focus of topics |
| organisation & infrastructure | - combination of study, work, family  
- communication between student and teacher  
- information and communication technology  
- technical infrastructure  
- logistics of learning material |
| requirements | - entry requirements  
- forms of examination  
- time of examination |

We define flexibility in time as possibility of the learner to decide when he learns (Seufert & Mayr, 2002; Van den Brande, 1994), to decide about the duration of learning (Collis, Vingerhoets & Moonen, 1997; Van den
Brande, 1994), if there are (nearly) no fix teaching times (Walker & Harrington, 2005) and if choice of learning pace is possible (Collis, Vingerhoets & Moonen, 1997; Ling et al., 2001). With the term flexibility of space there should be expressed that learning is independent of local conditions (Kerres, 2001; Ling et al., 2001). Into the category of methods we include aspects as follows: places of mandatory meetings (Ling et al., 2001), available learning resources (Collis, Vingerhoets & Moonen, 1997), as well as the language of teaching and learning (Collis, Vingerhoets & Moonen, 1997). The category learning styles refers to possibilities of cooperation in the learning process (Collis, Vingerhoets & Moonen, 1997; Ling et al., 2001) and to specifications of how learning is running (Ling et al., 2001; Van den Brande, 1994). The category content deals on the one hand with the focus of the topics (Collis, Vingerhoets & Moonen, 1997; Ling et al., 2001; Van den Brande, 1994) and on the other hand with the differences between theoretical and practical learning and teaching approaches (Collis, Vingerhoets & Moonen, 1997). The category organisation & infrastructure comprehends the use of information- & communication technology (Collis, Vingerhoets & Moonen, 1997), the combination of study, work and family (Arbaugh, 2000), the communication between learner and teacher (Hart, 2000), the technological infrastructure as well as the logistics of learning material (Collis, Vingerhoets & Moonen, 1997). In the context of flexible learning one often finds in the literature statements to flexible entry requirements (Collis, Vingerhoets & Moonen, 1997; Hart, 2000) as well as to flexibility of time and form of examination (Hart, 2000; Ling et al., 2001; Collis, Vingerhoets & Moonen, 1997).

In his study Arbaugh (2000) used eight items to record the perceived flexibility of the learning processes of students. In his evaluation based on the method of factor analysis he found two factors: course flexibility and program flexibility. Thus we decided to develop a new instrument to record the flexibility of learning environments.

b. Sample

Based on the seven categories we generated 42 items. This item pool was evaluated by 10 collaborators of our Institute allow to upgrade comprehensibility of the single Items. In decembre 2008 the questionnaire was filled out by 309 students which were enrolled in the first or third semester of the Bsc. in Psychology of the University of Berne. The students had time to fill out the questionnaire during a lecture. The sample consisted of 253 (82%) female und 56 (18%) male students. 282 students declared their age which varied between 18 and 47 years with an average of 22 years (SD = 4.27).

c. Evaluation and Results

In the first step we established an analysis of factors (principal component analysis with varimax rotation). With this procedure there were found 14 factors characterised by an eigenvalue higher than 1 and an explained variance 62%. The further evaluation with a scree plot of the eigenvalue leaded us to test also analysis with three and four fixed factors. The three factors solution opened a better resp. more coherent theoretical interpretation of the results and leaded us to prefer this variant. In the next step of evaluation all items with a load of factor less than 0.4 and which couldn’t be allocated to one of the tree factors on a theoretical level had been removed. Out of this procedure emerged a pool of 17 items which could be reduced to 13 items by conducting again two analysis of factors (PCA with varimax rotation) and the same rules of elimination of items. It even appeared also a distinct structure because items loading higher than 0.4
did do this only to one factor. With this definitive structure of the three factors we achieved an eigenvalue distribution of 2.69, 1.91 und 1.80 and an explained variance of 49%. These results together with the theoretical assumptions leaded us to name the three factors: flexibility of time, flexibility of contact with the teacher and flexibility regarding the content. Table 2 shows an overview of the three factors and the dedicated items. As last step we derived an item analysis of the scales of the three factors resp. categories. The first scale ‘flexibility of time’ consists of six items and a Cronbach’s Alpha .74, the second scale ‘flexibility of contact with the teacher’ of three items with a Cronbach’s Alpha of .70. The third scale ‘flexibility regarding the content’ which consists of four items with a Cronbach’s Alpha of .57 can be denominated as a part of our initially postulated category organisation & infrastructure.

Table 2: Categories and items of the questionnaire (translated from german origin)

<table>
<thead>
<tr>
<th>flexibility of time</th>
<th>flexibility of teacher contact</th>
<th>flexibility regarding the content</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can arrange the learning time myself</td>
<td>I can contact the teacher at any time</td>
<td>I have a stake in the focus of the topics of class</td>
</tr>
<tr>
<td>The learning pace is determined*</td>
<td>There are different possibilities available to contact the teacher</td>
<td>I can prioritise topics in my learning</td>
</tr>
<tr>
<td>I can decide, when I like to learn</td>
<td>Teacher are rarely at disposition to answer questions*</td>
<td>I can choose between the different learning forms: on campus study, online-study, self-study</td>
</tr>
<tr>
<td>I can define my learning pace myself</td>
<td></td>
<td>I can learn topics of special interest</td>
</tr>
<tr>
<td>I can decide how long the learning time is taking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can repeat the learning matters frequently</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\alpha = .74$</td>
<td>$\alpha = .70$</td>
<td>$\alpha = .57$</td>
</tr>
</tbody>
</table>

* the items had been reversed in polarity for the evaluation

**d. Discussion**

As already mentioned the concepts of flexibility of learning are used at the moment in a very inconsistent manner (Van den Brande, 1994). We and others for instance Garrick and Jakupec (2000) are persuaded that there are at the moment no satisfying conceptions. In our study we tried to construct a concept which indicates enough different dimensions of flexible learning as well as allowing measuring them. Although it was not possible to confirm empirically all seven categories postulated on a theoretical level the two scales ‘flexibility of time’ and ‘flexibility of teacher contact’ showed a well and the scale ‘flexibility regarding the content’ a reasonable internal consistency. At this point we can’t still not definitively clarify why the other categories couldn’t be empirically confirmed. Possible reason could lie in a lack of relevance of some categories for the concept of flexible learning, in a deficient reproduction of factors through some items in the questionnaire or the extraction based on a factor analysis did not fit some group specificities of the sample.

The in the literature mostly mentioned category ‘flexibility of time’ (Collis, Vingerhoets & Moonen, 1997; Seufert & Mayr, 2002; Van den Brande, 1994; Walker & Harrington, 2005, Ling et al., 2001) was also
reproduced in this study. It was even possible to make it measurable with seven items. Only indirectly mentioned in the literature is the second encountered category ‘flexibility of teacher contact’. Building a proper category and measuring it with five items we can appraise as a new findings of the study. For the third category ‘flexibility regarding the content’ considerations of some authors (Collis, Vingerhoets & Moonen, 1997; Ling et al., 2001; Van den Brande, 1994) existed already.

In some way we were surprised that in our study the factor ‘flexibility in space’ in the meaning of a delocalisation of learning was not reproduced. This factor is very often mentioned as an advantage of using e-learning methods ore ODL (Kerres, 2001, 2001; Ling et al., 2001; Seufert & Mayr, 2002). At the moment we assume, considering some unexplained questions mentioned above, that the impact of flexibility in space is sometimes overestimated because it is in the nature of learning respectively thinking and cognition to be independent of locations.

In a next step it will be important to analyse possible specificities of groups since we cannot exclude at this point finding another structure of factors in specific groups. For instance we can imagine that for a sample of ODL-Students there could be found some different results. Even when we will find again the same three factors it’s necessary to analyse if there is a considerable difference between the samples. Last but not least we like to point out that the intention of the study was not the explanation of the total variance of flexibility of learning but to find constituent categories of flexibility in learning. This shows also the result 42% of explained variance. This means the results of this study can’t and should not be interpreted in another way.

4. Empiric analysis of other affecting factors of learning performance
The above introduced model takes in account learning strategies, flexibility of the learning environment and other variables to predict learning performance. It is absolutely evident that there are other important factors which influence the learning performance. We will only mention some of them which are in relation to learning strategies like motivation, planning of time, concentration, exam nerves, identification of essentials, concentration, information processing, exam strategies and self control. Furthermore there is also to mention some other important and independent variables as previous knowledge, work, family situation and age. Taking in account of the huge variety of these different factors of affecting learning performance we will in the next studies analyse beside group’s specificities also the above mentioned factors which are in relation to learning strategies.

5. Options to enhance quality management of teaching and learning
If there is for instance an e-learning offer planned resp. arranged it is necessary to provide specification of the quality of the offer (Tergan, 2004). Besides of the character of the learning settings the interaction with learners is a function of quality of learning (Clark & Sugrue, 1990). This means the learner and the learner perspective plays a much more important role as assumed a long time (Appli, 2005). This requires a new comprehension of quality in learning (Tergan & Schenkel, 2004). In this perspective it’s crucial for the quality of learning environments that the learners experience elements of learning services as helpful (Ehlers, 2004). This means a systematic gaze to quality is profitable because quality of learning offers emerge with the learner and not per se. Hence learning environments has to be adapted continuously to learning stiles,
learning forms and aptitudes of the learners. We see four scopes of the results of our study to enhance quality management from the learner perspective: (1) by giving the students feedback and advice to initiate reflection to their learning strategies, (2) by sensitize tutors towards the learning patterns used by the students, (3) by using the results for the training of tutors and advice for learners and (4) by also using them for adaptations of the learning environment.

References


QUALITY ASSURANCE IN OPEN AND DISTANCE LEARNING
IN INDIA

S.K., Gandhe, Symbiosis Center for Distance Learning, India

Summary

1. Higher education including open & distance learning is an instrument of transformation. This transformation cannot come about without high quality of the system and what the system offers. It is difficult to define quality. In the distance learning system, quality is best defined as fitness for purpose in combination with exceptional high standards, perfection and consistency, value for money, and transformation capabilities. Quality assurance must cover areas such as curriculum design, content and delivery organization; teaching, learning and assessment; etc.

2. India has always been quality conscious in education. From olden times Indian peers have laid great emphasis on quality. In recent times, several national level efforts are made to ensure quality, like the National Education Policy of 1968, the National Policy on Education of 1986, setting up of National Assessment and Accreditation Council, Several higher education regulatory bodies including the Distance Education Council.

3. The case study given in part 2 indicates the quality concerns expressed in the working of Symbiosis Centre for Distance Learning, a leading private sector provider of distance learning in India. Quality assurance is brought to bear in practically all the aspects of the Institute’s functioning, like academic, assessment and evaluation, student care & support, etc.

This paper is divided into two parts: The first part deals with the emergent need for quality assurance in the Indian open & distance learning, the policy framework developed over the years for assuring quality in education, and the efforts made towards attaining it. The second part presents a case study on quality concerns and practices in the Symbiosis Centre for Distance Learning, Pune, India, where I work.

Part I
I. Introduction

It is well recognized that higher education including open and distance learning, is an instrument of social and economic transformation. It is the most important source of HRD all over the world. One cannot think of this transformation without a quality-conscious education system. Quality in higher education is synonymous of well developed HRD scheme. I would go a step further and say that education without quality is no education at all.

How does one define quality? In particular it is not easy to precisely decide what constitutes quality of education. Different persons may have different perspectives of quality. There are two aspects of quality in the educational context: quality of the system as a whole and quality of what the system offers to the students or the learners. In relation to conventional education quality covers various components of face-to-face teaching like the infrastructure and basic amenities, social & geographical environment, professional competence of the teaching, administrative and finance staff, appropriateness and relevance of the curriculum, teaching-learning materials, teaching and learning processes, community support to the institution, performance evaluation of the teachers, students and the system as a whole.

However, ODL is not the same thing as the conventional education. The profile of the distance learner is much different; her/his main objective of taking to higher education through the distance mode may also be much different than the 17-23 age-group of tertiary college students. In a country like India which has a huge backlog of adult illiterates, semi literates and the educated unemployed, all in search of new knowledge and new skills including professional skills, ODL is a god-send opportunity. It is against this background that the Government of India has planned to raise enrolment in the ODL system from the current 20-22% to 40% during the Eleventh Development Plan (2007-12).

II. Quality in Education Defined

Quality is often defined as embracing effectiveness, efficiency and accountability. These terms, however, have connotations with terms used in trade, commerce and industry. Education per se and higher education in particular, is much different; every element therein - input, process and output - is a human being, which is a very complex and highly individualistic phenomenon. Education is no more a sheer effort to become “learned”. It is a means to prosper in personal life and achieve higher living standards. It reflects needs and aspirations of the beneficiaries. Hence quality in higher education is defined as “fitness for the purpose”. But this is somewhat an elusive criterion. I would group quality in education as a combination of:

- Exceptional high standards
- Perfection and consistency
- Fitness for purpose
- Value for money, and
- Transformation capabilities

III. Application of Quality in ODL

Open learning removes barriers in access like admission pre-requisites, physical attendance at a particular place and time, possession of prescribed equipment, books, journals, and so on. Distance learning means that the learners are physically separated in space and time from the teaching institution and its staff. Nevertheless, the broad
criteria of quality concerns mentioned above apply, *mutatis mutandis*, to open and distance learning also. A special feature of ODL is the application of well-tried principles of division of labour and specialization operating more systematically and self consciously than in the conventional system. The five areas of quality concerns need to be vigorously applied to the following elements of ODL to ensure that no element lacks the expected degree of quality:

- Curriculum design, content and organization
- Teaching, learning and assessment
- Student progression and assessment
- Student support and guidance

The panoply in quality education has a three-pronged approach: internal quality assurance mechanism; evaluation by peers; and accreditation by an independent and competent organization. Quality measurement of education institutions rests on this panoply. A good and serious ODL institution will ensure that the three-pronged approach is adopted to ensure the best quality in all the aspects of distance learning.

The concept of quality is complex and value laden. But in the ODL system, quality means attainment of the expected levels of knowledge and skills which are tools for further learning by actual work experience necessary for managing the learner’s personal and social transaction in day–to-day life. This quality is to be attained by all distance learners, in a given time-frame.

IV. Quality Concerns in India

India has always been quality-conscious in education. From times immemorial, Indian peers have laid great emphasis on quality education, and evolved systems and concerns for ensuring quality. Some of the national-level efforts in the recent past are given below:

- **1968 National Education Policy.**
  - Radical reconstruction of the education system.
  - Rapid expansion in coverage.
  - Improving Quality, utility, financial outlay, and access.

- **1986 National Policy on Education**
  - Constitutional amendment (1976). Education brought into the Concurrent list.
  - Central Govt: Reinforce national and integrative character of Education, maintain quality and standards, monitor educational requirements, promote excellence.

- **1986 NPE, Two recommendations**
  - Excellence (Institutes and individual) to be recognized.
  - Award autonomy to select institutions.

- **1986 NPE and Programme of Action (POA) recommended a National Accreditation Body.** After several discussions in Committees, Sub-committees, national/regional debates, and consultations, finally NAAC was set up on 16th Sept. 1994. A totally autonomous organization.

- **NAAC:** The National Assessment & Accreditation Council is an independent autonomous body with a mandate to assess the quality of all facets of tertiary level institutions including universities. The NAAC has developed strict norms for
assessment & accreditation. Institutions receiving high grading from the NAAC certainly raise their credibility and acceptance in the community.

- The Distance Education Council set up under the Indira Gandhi National Open University Act has been assigned the regulatory role for the open & distance learning universities and the higher educational ODL institutions. The DEC examines the working of these universities and institutions in all its aspects before granting recognition. This has had a salutary effect on their working. It is likely that the DEC also undertakes assessment and accreditation of the open & distance learning institutions in India in the near future.

Part II

A Case Study on Quality Assurance effort at the Symbiosis Centre for Distance Learning, Pune, India

The Symbiosis Centre for Distance Learning (SCDL), Pune, is the leading private sector provider of open & distance learning in India. Its learners, numbering more than 200,000 are drawn from all the nooks & corners of India, and also, from more than 40 overseas countries. Quality is the hallmark of SCDL’s working. The quality concerns adopted by the SCDL are presented below:

- The learning programs are selected very carefully, taking into consideration the market demands as well as the felt-needs of the learners. Once a tentative decision is taken to introduce a new program, its various pros & cons are discussed in the Academic Council, which is the principal body for taking all academic decisions. If the AC approves the proposal to introduce the program, an Expert Committee is appointed which draws a well-considered curriculum for that program. Great attention is paid on the latest trends and developments relevant to the subject. The Expert Committee may also suggest detailed course-contents for which the Self Learning Materials have to be prepared.

- The next step is to allocate the work of writing the Self Learning Materials. For this purpose the SCDL has enlisted more than 400 visiting faculty who are all well qualified and long experienced teachers from reputed universities and colleges as well as persons with practical experience in industry. Orientation programs are arranged for these faculty. The curricula approved by the Expert Committees are discussed and then they are required to provide the Table of Contents and also write one model unit or chapter. The TOC and the model unit are thoroughly examined by the Expert Committee members and improvements, modifications etc., if any, are suggested. Orientation of the faculty is held from time to time to ensure that the guidelines are properly followed.

- Once the soft-copy of the SLM is received, it is subjected to different types of editing, like the content editing to ensure that the most modern developments are incorporated in the content, the mode editing to ensure that the specified distance learning mode of writing is followed, the language editing to ensure that the language is simple, free of jargon and easy to understand by the distance learners who come from a large variety of social, economic and regional backgrounds. The volume and size of each unit is predetermined such that the remotely located distance learner is able to study it.

- Electronic learning materials in the form of e-learning modules and pre-recorded DVD lectures are also prepared. These are complementary to the SLMs to further enrich the learners’ knowledge. Case studies based on live-experiences are used in these materials. The faculty preparing the electronic learning materials may, or more likely
not, be those who had prepared the SLM in the print form. While the e-learning modules are supplied free of cost as a part of the study kit, the DVD lecture disks are sold at a nominal price. These electronic materials have become very popular with the learners.

- An important aspect of the academic functioning of the SCDL is its constant endeavour to update the materials supplied to the distance learners. Whether it is the print or the electronic learning material, content-review is a regular feature for ensuring that the latest in the subject matter is incorporated. For this reason the SCDL does not keep large stocks of materials but arranges fresh production every year.

- Self assessment is an important system adopted by the SCDL. All the learning materials sent to the distance learners – whether print or electronic – contain self-assessment questions. In fact the learning material contents are broken down into sections and sub-sections, and at the end of each the learner is expected to take a pause and attempt answering the self-assessment questions. This way, the learner will come to know whether she/he has understood the content of the section or the sub-section. This process builds up the learners’ confidence.

- A distinguishing feature of the SCDL is the use of most modern technology in the student progression and assessment system. Each learner is required to complete two online assignments per course per semester. The online assignments are based on the thoughtfully prepared and exhaustive Question Banks which are uploaded on the web for accession by the learners. For the term-end examinations also questions are uploaded on the web and learners access the website by use of their individual log-ins. The SCDL has adopted the system of online and on demand examination. Both are evaluated automatically by the use of electronic devices, and the results are available instantly.

- Last but not least of the quality assurance measures cover the Student Support & Guidance System. This system has three important planks: the Personal Contact Programs (PCP), the Data Support Department and the system of quick response to students' queries and requirements.

- The PCPs are held at different centres where the learners from that area gather and seek assistance in better understanding of the study materials and on the spot clarification of their doubts. Subject experts are available throughout the duration of the PCPs for interaction with the learners. In a specially blended diploma program for the Corporate executives, weekend lectures at the premises of the corporate office are arranged. These lectures cover most of the important topics covered in the SLM, besides answering doubts and queries of the corporate executives.

- The Data Support Department uses a fully computerized system for building a thorough data base wherein all the relevant information and facts & figures related to the large number of learners, as well as various other activities relevant to the functioning of the SCDL, are stored and made available instantly. The online registration data are also carefully recorded.

- Under the system of quick response to student queries, the SCDL has set up a Call Centre and a Student Support Centre at its Head-quarters at Pune. The queries, difficulties etc. raised by the learners are attended to within 24 hours. Likewise, the queries etc. raised through e-mails are answered by the Student Support Centre, again within 24 hrs. The staff of the CC and the SSC are well informed and trained in dealing with the FAQs which account for a large majority of the queries. If necessary, some queries are also referred to the departments concerned and the information thus collected is passed on to the students.
In the end it may be reiterated that quality is the hallmark of SCDL. Over the years it has earned a reputation as an institution with high concern for quality. The courses are constantly reviewed, revised and updated.

Conclusion

It is not easy to define quality in relation to education. There are two aspects of quality in education: Quality of the system as a whole and quality of what the system offers to the students/learners. Unlike trade, commerce or industry where the inputs, processing and the output are independent elements, in education every element – input, process and output – is the human being which is a very complex and highly individualistic phenomenon. Quality in education should necessarily reflect on the purpose for which the learners spend 20 years of life, which in India is almost one thirds of the expected life span (60 years). Therefore, quality in education is best defined as Fitness for Purpose, with high standards, perfection, consistency, value for money and transformation capabilities.

It may be added that without rapid spread of real quality education, there can hardly be any scope for sustainable development. As a matter of fact education has to be quality education only; no education without quality is education in the real sense of the term. There is no gainsaying the fact that without improving the quality of education, there is no hope for a real sustainable development of India. There is a significant relevance of improving education quality to sustainable development in India. If the ODL system, which has a far better reach to the interior rural areas and the disadvantaged sections of population, has to play its expected role in India’s sustainable development, it must raise the quality of all aspects of its working.

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Leading innovative approaches to the financial crisis

Dr. Sarah Guri-Rosenblit

A financial crisis as a crisis in any other domain, whether it takes place in our personal life, in a national context or in the international global arena, forces us to mobilize our imagination and creative thinking in order to overcome this crisis. By succeeding in overcoming it, we even aim to become better and stronger.

In this workshop we will try to analyze how distance teaching providers can mobilize new innovative approaches to the financial crisis, but not only to the financial crisis. We will also relate to what I term "an existential crisis" of distance education providers, coupled with the financial crisis.

When I speak about an existential crisis, I first of all refer to the mission of distance education, which for over 150 years was very clear, and is today no longer so clear. Distance education by its very nature was very different from campus-based universities. It has changed the philosophy and underlying premises of how a university worked. Instead of assembling students from different places onto one campus, the distance teaching universities reach out to students wherever they are located and prefer to study. Nowadays, through the new digital technologies, any university can reach out to students outside its residential campus. So the distinct role of distance teaching universities is not so clear any more.

Furthermore, when higher education systems started to expand in Europe and elsewhere in the world, mainly since the late 1960s, one of the important missions of the large-scale distance teaching universities was to provide economies-of-scale, i.e. to demonstrate that it is cheaper to provide higher education in this modality, as compared to teaching at campus based universities. This goal has been achieved through the industrial model of distance education, pioneered by the UK Open University which was established in 1969. High quality study materials were prepared by small teams of experts and distributed to dozens of thousands of students. How to provide economies-of-scale in the digital age constitutes today a crucial and problematic issue. Many studies point to the fact that online teaching turns sometimes even more expensive than face-to-face teaching, if applied in small virtual classes taught by experts. Unquestionably, finding the balance between being able to enrol large numbers of students and providing them with high quality education at a lower cost presents an immense challenge for distance education providers in the digital age.

New terms have entered the discourse on distance education in the last decades, and it is also reflected in the programme of this SCOP meeting. E-learning, ICT-based education, flexible education and open education are terms which describe many distance education operations quite fairly, but in no way are they exclusive just to distance education.

A few years ago I published an article on "E-learning and Distance Education: Not the Same Thing", and I deal with this issue also in my recent book on "Digital Technologies in Higher Education: Sweeping Expectations and Actual Effects" (Guri-Rosenblit, 2009). E-learning is not a synonym for distance education. Based on an analysis of hundreds of articles, reports, books and reviews on the applications of digital technologies in higher education settings worldwide, I can tell you that currently most of the various uses of the digital technologies take place in campus based universities; and most of distance education at the higher education level is not delivered through digital technologies.

Other terms which are frequently associated with distance education are "open" and "flexible" education. If we refer to the term "open" as indicating open access, many distance teaching universities are not open at all. As matter of fact, only a few distance teaching universities have adopted an open admissions policy. Even our hosting university for this SCOP meeting, Universitat Oberta de Catalunya (the Open University of Catalonia), has entry requirements for most of its programmes. On the other hand, there are many campus based higher education institutions that...
have an open admission policy and demonstrate other openness dimensions. So, openness is not a distinct feature of distance education providers. Also the term “flexible learning” does not characterise necessarily distance education. There are many campus based universities and colleges that apply flexible measures and policies. The community colleges in the US are very open and very flexible in the sense that anyone can complete an associate degree and continue towards a bachelor degree at a university. In California, for instance, graduates of community colleges can continue their studies even at highly ranked and prestigious universities like the University of California at Berkley or UCLA, which is quite unthinkable at this stage in Europe or in many other parts of the world. No one would suggest that the community colleges in the US are natural candidates for joining the International Council for Open and Distance Education.

I point out these problems not just to highlight a semantic confusion. It seems that there is a much deeper confusion regarding the role of distance education in the contextual higher education arena right now.

There is a further problem which describes the existential crisis of distance education providers in developed countries. When distance education expanded in the second half of the 20th century, only some 5%-10% of the relevant pool of students participated in higher education. Currently, in some European countries and in the US, the relevant age cohort participating in higher education is over 50%. So, obviously the relevant pool out of which distance education establishments can source undergraduate learners is getting smaller.

An additional problem faced by distance teaching universities is the much greater competition for students and resources. Many campus universities and new private institutions offer today distance education programmes. It is interesting to note that most members of our workshop group do not represent single mode distance teaching universities. Some come from campus teaching universities, like Hong Kong University, one of the leading research universities in the world, a member of Universitas 21, and ranked as the second research university in Asia. Hong Kong University has established a professional continuing education school which has now become independent. It teaches around 23,000 students on its campus, and nearly 100,000 in various continuing and professional education programs outside its residential campus. The range of new distance education providers has become really plural. One of the defining features of higher education in the last decades is the growing diversity of higher education institutions, and there is certainly more diversity among distance education providers. So there are currently not just dual- and single mode distance teaching universities, but in-between you have many sub-types of distance education. In Germany, for example, you have a virtual university in Bavaria which is a network developing e-learning courses for over 20 Bavarian universities, and is not an autonomous university. In Brazil, many corporate universities have been established in the last decade utilizing distance teaching, and there are many more manifestations of distance education operated by various-type institutions.

As aforementioned, the cost-effectiveness of distance education in the digital age poses a serious dilemma. Many studies point out that if you really want to employ the wide range of capabilities offered by the electronic technologies, sometimes it costs even more than face-to-face education. So we have to deal with it. It constitutes an immense challenge, particularly to the large-scale single mode distance teaching universities that are based on the industrial model. Sameness constitutes one of underlying principles of the industrial model. The same study materials, assignments and exams apply to all students. Very little flexibility is enabled in such a system. Whereas, online teaching calls for applying flexible methods in the teaching process in order to cater to the needs of different students, and take into account the products of a collaborative teaching/learning process. Definitely, the implementation of online teaching requires a redefinition and an overhaul of the existent infrastructures of many distance teaching universities.

Another dilemma relates to the problem of getting donors’ funds for experimenting with new study environments enabled by the digital technologies. Many donors in the philanthropic world are
approaching renowned research universities when they are willing to donate large amounts of money for experimenting with these new technologies. When Bill Gates first had the idea of an I-Campus in 1999, he approached MIT in the United States and Cambridge in the UK, not the UK Open University or UMUC. Maybe we will see a change at the UK Open University with the new Vice-Chancellor coming from the corporate world.

An additional problem which confronts distance teaching universities relates to their academic reputation and future budgeting. You heard today in the keynote address of the growing importance of ranking tables. There are currently many ranking tables, but the two most important ones are the Times Educational Supplement in the UK and the Jiao Tong Shanghai University ranking of 500 leading research universities. In these rankings, research plays a very important role. The last decade has witnessed increasing cuts from government to higher education budgets, and research activity constitutes an important variable for government funding. Since most distance teaching universities are not well renowned for their research, it might affect in the future both their budget and academic status. Governments are requiring today from higher education institutions a much greater accountability, side by side with encouraging them to demonstrate a greater entrepreneurship in generating funds for their ongoing operation. Distance teaching universities have to be most resourceful and creative in finding new paths for strengthening their financial base.

After outlining the major challenges facing the future existence of distance teaching universities, I would like to relate to the term "innovative approaches". According to the Collins English Dictionary, "innovation is the introduction of a new idea or method that is introduced in the way that something is done or made". Changes in our life and in organizations take place all the time, while an innovation is something that has to be initiated in order to improve something. Not all innovations are successful. Some innovations might turn disruptive if to use a term introduced by Christensen (2008). Unfortunately, the implementation of many innovative technologies has turned out to be disruptive. There are many examples in the last decade of dot.com endeavours established by leading universities in the US which failed, causing the loss of huge amounts of money. I would even say that one of the ideas which we heard in the keynote address that suggested to adapt a policy of managing a football team to higher education might turn disruptive in many higher education contexts.

So the challenge facing distance teaching providers today is to identify and adopt sustainable, rather than disruptive, innovative approaches to handle the financial crisis and other current and future challenges.

In our workshop we will deal with five domains which are relevant to the identification of innovative approaches to tackle the existential and financial crisis of distance education providers. The five domains are related to the: missions of distance education, student constituencies, scope of programmes and curricula, technological infrastructure, collaboration and competition.

The traditional mission of distance teaching universities has been to widen access to academic and professional studies mainly to second-chance students. Second-chance students were those that for a variety of reasons could not study at a campus university, due to lack of entry qualifications, work/family/health constraints, living in a remote location, being a woman, serving in the army, etc. The large scale distance teaching universities that were established since the late 1960s could draw from a large pool of second-chance students, and also got relatively generous government funding, which is not the case right now.

This mission of widening access to second-chance students is also valid for today distance education providers, though many conventional campus universities offer nowadays study tracks for non-traditional student clienteles. Leaders of distance teaching institutions should rethink the current missions of distance education. They should decide whether they opt to operate in the global arena or focus mainly on local and national goals. They should consider how to launch a closer interface with labour markets and the corporate world, and decide whether they would like to shift their focus to
providing lifelong learning and professional upgrade. They should deliberate on how it is possible to monitor and enhance quality while operating in a global network. Definitely, these are complicated and challenging tasks which will shape the future development of distance education providers.

Listening to the keynote today and from discussions at the reception yesterday, it came to my mind that maybe an important mission of global bodies, like ICDE, is to mainstream distance education as an integral part of higher education. It is not just to coordinate different distance education providers, but very much to integrate distance education more fully into the higher education systems in the various national jurisdictions. I read carefully the UNESCO World Conference conclusions following the World Conference on Higher Education which took place in July 2009 in Paris. Article number 24 states that: "International cooperation in higher education should be based on solidarity and mutual respect". "Mutual respect" is a key issue. I can tell you from my experience of researching higher education systems in the last 15 years that while in many higher education contexts distance teaching universities have gained respect, in many others - distance teaching universities have not gained the respect of traditional universities. Respect is a tremendously important factor for collaboration and for the future status of distance education.

When I started my research on distance and campus universities 15 years ago, I chose a sample of five single mode distance teaching universities: the UK Open University, Athabasca University in Canada, Fernuniversität in Germany, UNED in Spain and the Open University in Israel. I discovered a conceptual divide between scholars that deal with higher education, and those that focus on distance education. In many studies of higher education, distance teaching universities are not mentioned at all, and if mentioned they are presented as operating on the margins of higher education systems, or even outside the realm of higher education. When you read the literature of scholars who deal with distance education, on the other hand, they view it as the most innovative development in higher education since the Middle Ages, as revolutionary establishments, or the only way of studying in the future. There is a huge conceptual gap between mainstream and distance education scholars. In my book on "Distance and Campus Universities: Tensions and Interactions" (Guri-Rosenblit, 1999) I tried to combine between these two worlds that do not interact and show how each distance teaching university in its national context contributes to higher education at large. I believe that we still have a lot of work to do in mainstreaming distance education into higher education systems.

The second issue we will deal with in our workshop is that of student constituencies. The traditional constituency of distance teaching universities has been usually older (30+), mostly employed, part-time, living mainly in national or local jurisdictions, and mostly pursuing undergraduate degrees. Right now we have a much more diverse student constituency, and the question is - who will be our future student constituencies? Should we also be attractive to young students while still studying at high school? At the Open University of Israel, for instance, we have talented high school students, some of who complete their degree at the same time as their high school diploma. Should distance teaching universities compete for full-time students, and offer them campus-based studies? We can see today more and more distance teaching universities, particularly new universities, which teach concurrently part- time and full- time students, offer on- campus and off-campus studies, which was not the case 40, 30, 20 and even 10 years ago.

Distance teaching universities have a natural capacity to reach outside national borders. However, when we relate to transnational students, we should be aware that most of them are enrolling at campus based universities. I can be considered as a transnational student when I moved from Israel to the United States to study for my PhD. Most of the students who go to New Zealand, Australia, the United States and Europe are not distance education students. Again "globalization" is a blurred concept. Globalization per se is not conducted mainly through distance education. Distance education leaders should invest efforts in enhancing the number of their transnational students.

Another interesting question to consider in relation to future student constituencies is whether distance teaching universities should focus mainly on offering academic degrees, or shift their
operation to providing more short-cycle professional upgrade programs, and courses for personal
development and recreation.

The scope of programmes and curricula is the third issue which will be dealt in our workshop. When I
read the memoirs of Lord Perry, the first Vice-Chancellor of the UK Open University, he confessed
that at the beginning he was thinking of developing totally new innovative programmes. But then he
got cold feet because he decided that if he did so, graduates would encounter problems to be
accepted to any other academic institution. The same worry applies today - do we want to offer
programmes that are the same as in conventional universities or different and unique? Do we want to
offer a broad comprehensive curriculum or focus on niche areas which have a high market demand?
More and more distance education providers, mainly for-profit institutions, are concentrating today on
niche areas, such as business administration, law, computer science, etc.

Furthermore, most of the distance teaching universities focused in their early operation on
undergraduate studies. The time is ripe to reconsider this trend. In my opinion, graduate studies are
much more suitable for distance education, because you get students who have gone through
academic studies, and they can much more easily adapt to a self-study environment. Many studies
point to the fact that the biggest successes of online education take place at the graduate and
postgraduate levels.

The fourth issue to be dealt in our workshop relates to the technological infrastructures of distance
teaching providers. Most of the large scale distance teaching universities offer high quality print-based
materials augmented by other media. The digital technologies are used mainly for add-on functions,
and do for substituting the printed materials and the tutorials. Universitat Oberta de Catalunya is
exceptional in the European landscape of distance education. It was established 15 years ago as an
online university. In the United States, too, most distance education is carried out through the use of
digital technologies.

As aforementioned, the implementation of the digital technologies within distance teaching
universities which are based on the industrial mode requires a major restructuring of the teaching
mode of these universities. Other challenges which are associated with the implementation of the
digital technologies relate to the urgent need overbridge the digital divide between developed and
developing countries and between rich and poor; the challenge to find a working model of distance
education that continues to offer cost effectiveness advantages in the digital age; the efficient
utilization of the open educational resources to minimize costs; and how to overcome language
barriers when operating in the global arena.

The last issue to be dealt in our workshop relates to the crucial importance for distance education
providers to identify partners and competitors, and to base their business and academic models
accordingly. In the past, distance teaching universities emphasized their being stand-alone and
autonomous universities. It has been of immense importance to establish their autonomous status vis-
à-vis the traditional campus universities. But the rules of the game have changed dramatically in the
higher education market in the last decades. Universities are required to operate in a global market, in
which it is an imperative to combine forces with other higher education institutions and the corporate
world, and identify the potential competitors. In our workshop will deal with how we can mobilize
fruitful collaborations in order to attract new student clienteles, reduce costs for course development,
enhance flexibility, ensure high quality mechanisms, provide richer and better programmes, and
strengthen the financial basis of distance teaching institutions. It is not easy to maintain a successful
collaboration. The relevant literature is full of stories of failures of collaborations. Finding appropriate
partners and maintaining a fruitful collaboration constitute most challenging tasks that are crucial for
the future of distance education providers.
References


TOWARDS KNOWLEDGE BASED ECONOMIES - the contribution of open distance learning strategies in addressing equity and inclusiveness issues in small states like Mauritius.

ABSTRACT
Equity and inclusion in education are increasingly being acknowledged as critical issues for national development. This is reflected in conventions and commitments taken by various governments and impacts on the achievement of the UN Millennium Development Goals as well as the UNESCO Education for All Goal.

This paper attempts to define equity and inclusion in education and discusses its importance for national development. The purpose of education and inclusion in education systems is to advance the cause of social justice and equity. Achieving equity and inclusion in education is a human rights issue and is a real challenge for many countries. What are the barriers or causes of inequity and exclusion? These are quite complex, the barriers being multidimensional and there is no “one size fits all” solution.

Addressing the issue of equity and inclusion in education has political, social, economic, technological and cultural implications. How do we achieve this goal for every child? It is both an opportunity and a duty.

One of the proposed strategies in this paper will be to adopt and integrate open and distance learning (ODL) in the mainstream of the education and training system. Some of the challenges facing small states are also highlighted. Properly designed and managed ODL can increase access and contribute towards achieving equity and inclusion in education – when combined with the relevant enabling environment.

THE KNOWLEDGE ECONOMY
The knowledge economy can be regarded as one that relies more on the

- use of ideas and knowledge rather than physical abilities,
- application of technology rather than the transformation of raw materials or the exploitation of cheap labour.

Knowledge is regarded as the core national value through which people achieve
(i) greater choice and opportunity;
(ii) deeper social integration.

No country can remain competitive without applying knowledge especially when economic growth is increasingly driven by knowledge. This is even more important for small states. Rapid advances in the science and technology provide potential for small states to accelerate and strengthen their economic and social development. The twenty-first century has been called the “Century of Grey Matter”, meaning the intellect, which constitutes a new source of wealth for our planet.

There is a clear relationship between knowledge/skills development and economic growth. The most important key to national development is education/training driven by principles of equity and inclusiveness. This must start with universal pre-primary and primary education for all children accompanied by an open, dynamic system of secondary and tertiary education that includes adult continuing education in an environment that supports and sustains lifelong learning.

In the 21st century, workers need to be lifelong learners, adapting continuously to changed opportunities and labour market demands of the knowledge society. Lifelong learning (LLL) is not a luxury in view of such incessant economic changes. There is already talk of the “liquid society” (Bauman 2000), quoted by Suzy Halimi in UNESCO/COL (2005) (“Perspectives in Distance Education - Lifelong Learning & Distance Higher Education”. This means a society in constant flux —Education systems will have to evolve in that direction.

Thus education and training are central to strengthening the human capital base which supports the pillars related to skill building, national innovation systems and national development. This implies

- improving access and equity to learning opportunities;
- inclusiveness – a strong foundation to empower all individuals to engage in LLL;
- quality and relevance of learning opportunities.
Equity and inclusiveness in education are increasingly being acknowledged as critical issues for national development. This is reflected in the various conventions and commitments taken by various governments and impacts on the achievements of UN Millennium Development Goals (MDGs) as well as the UNESCO Education for All (EFA) goal.

**EQUITY**

“Educational equity refers to an educational and learning environment in which individuals can consider options and make choices throughout their lives based on their abilities and talents.

The achievement of educational equity enables everyone to develop skills needed to be productive and empowers individuals. It opens economic and social opportunities regardless of gender, ethnicity, or social status. Educational equity includes equities in

- access,
- participation,
- achievement and educational outcomes and creation of fair learning environment for all.

Thus the definition of equity is broad and emphasizes both equity in opportunities and equity in educational outcomes. Equity in education is thus not only a question of opportunities provided. It is also about the actual results of the various educational choices and performances of different groups of learners in the educational/training system. It implies focusing on socio-economic outcomes including maintaining employability and the capacity to participate in the knowledge economy.

Learners are different along several dimensions which have an impact on their need for learning and follow-up in the educational system. Individual learners have differences in motivation, interests, and intelligence. Differences in the economic, cultural and social resources in their environment have an impact on the equity aspect. The school culture and resources allocated to the different parts of the educational system have an impact on equity in education.
Thus, inequity in education may be caused by

- structural and economic differences within the educational system;
- differences between learners.

**INCLUSIVENESS**

Our starting point could be the Education For All Goal.

"Basic education for all requires assuring access, permanence, quality learning, and full participation and integration of all children and adolescents, particularly for members of indigenous groups, those with disabilities, those that are homeless, those that are workers, those living with HIV/AIDS, and others." (EFA, 2000)

Inclusion in education means

- educating all children with disabilities in regular classrooms regardless of the nature of their disabling condition(s).
- providing necessary services within the regular schools.
- teaching all children to understand and accept human differences.
- providing them enhanced opportunities to learn from each other’s contributions.
- supporting regular teachers and administrators (e.g., by providing time, training, teamwork, resources and strategies).
- providing an appropriate individualized educational programme.

Inclusion in education involves

- increasing the participation of students;
- restructuring the policies and practices in national system so that they respond to the diversity of students;
- reducing barriers to learning and participation for all students;
- viewing the difference between students as resources to support learning, rather than as problems to be overcome.
The purpose of education and for inclusion in the education systems is to advance the cause of social justice and equity. Achieving inclusion in education is a human right issue and is a challenge for many countries. The causes of inequity and exclusion may be multidimensional and it is difficult to have a “one size fits all” solution.

For inclusion to work, educational practices must be learner-centered. This means that teachers must discover where each of their students is academically, socially, and culturally to determine how best to facilitate learning. Learner-centered teachers view their role more as being facilitators of learning rather than simply transmitters of knowledge.

Therefore, skills in curriculum-based assessment, team teaching, mastery learning, assessing learning styles (and modifying instruction to adapt to students’ learning styles), other individualized and adaptive learning approaches, cooperative learning strategies, facilitating peer tutoring and "peer buddies," or social skills training are important for teachers to develop and use in inclusive classrooms. Soffer (1994), quoted by Richard Tompkins and Pat Deloney, Research Associates, Services for School Improvement, SEDL, (Vol 4 Number 3, 1995) emphasizes that these are not just good special education practices, but are good practices for all teachers.

The process of inclusion can be supported by

- a change in attitudes;
- putting into practice a stated commitment to the principles of inclusive education;
- adapting initial and in-service training of teachers and supporting head-teachers;
- understanding that the greatest barriers to inclusion are caused by society and the system.

Education and training systems are at a turning point. The economic importance of knowledge and innovation is increasing, along with reliance on technology and demand for both traditional skills and new competencies. People therefore need access to learning on an on-going basis. This in turn requires a stronger alignment of institutions and policies to create high performance, learner-centred and learner-driven systems.
Developing small states face a particularly acute challenge in this area. For example, they need to

- expand coverage to achieve universal access to basic education,
- increase access to secondary and tertiary provisions;
- improve the linkages between formal and non-formal education systems and the labour market;
- improve the quality of learning;
- expand learning opportunities beyond initial formal schooling.

while paying ensuring equity and inclusiveness.

THE CURRENT STATUS IN MAURITIUS – Its education system
Mauritius has a 6+5+2 education structure that rests on a two year pre-primary foundation. It comprises six years of compulsory primary schooling from Standard I to Standard VI leading to the Certificate of Primary Education (CPE). This is followed by five years of compulsory secondary education from Form I to Form V leading to the Cambridge School Certificate (SC). An additional two years of secondary schooling ends with the Cambridge Higher School Certificate (HSC).

Education is free at the primary and secondary levels. At the tertiary level, all full-time undergraduate programmes are free at the University of Mauritius (UoM). However part-time programmes are fee-paying, although they are subsidized by government. Programmes at the University of Technology Mauritius (UTM) which is publicly funded are also fee-paying but subsidized.

The distribution of schools, enrolment and personnel at pre-primary, primary and secondary levels in March 2005 is given in Table 1.
Table 1 - Distribution of Schools, Enrolment and Personnel in March 2005

<table>
<thead>
<tr>
<th>School</th>
<th>Island of Mauritius</th>
<th>Island of Rodrigues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-primary</td>
<td>Primary</td>
</tr>
<tr>
<td>No. of Schools</td>
<td>1,039</td>
<td>278</td>
</tr>
<tr>
<td>Enrolment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>18,228</td>
<td>60,335</td>
</tr>
<tr>
<td>Girls</td>
<td>17,736</td>
<td>58,402</td>
</tr>
<tr>
<td>Total</td>
<td>35,964</td>
<td>118,737</td>
</tr>
<tr>
<td>Teaching Staff</td>
<td>2,426</td>
<td>6,425</td>
</tr>
<tr>
<td>Non-Teaching Staff</td>
<td>856</td>
<td>1,424</td>
</tr>
<tr>
<td>Teacher:Pupil ratio</td>
<td>1:15</td>
<td>1:29</td>
</tr>
</tbody>
</table>

[Source: Central Statistics Office (2005), Economic and Social Indicators, Number 523]

Pre-vocational education is offered to those who have failed the CPE examination. In March 2005, 147 schools were offering pre-vocational education: 142 on the island of Mauritius and five on Rodrigues. Enrolment in the schools offering pre-vocational education was 9,845 comprising 6,121 boys and 3,724 girls. The pre-vocational education teaching staff numbered 648 (239 men and 409 women).

Access to quality services in the pre-primary education sector is vital for the developing of a strong foundation for intellectual, socio-emotional and psychomotor development. This is critical for strengthening the foundations of life long learning and towards the knowledge society. The Gross Enrolment Rate for the pre-primary sector in Mauritius stood at 94% in 2005. The report (August 2006) by ADEA, entitled “Initiating and Conducting an Experimental Peer Review Exercise in Education in Africa”) notes that in Mauritius

“A critical concern for this sector is whether all children are receiving equal access to quality pre-school education. There is a perception that an unequal provision of facilities and teachers for pre-schools dependent on the socio-economic class that supports the school exists.”
The situation is similar at the primary level. Mauritius has made significant progress towards providing universal access to primary education through a system that is free and non-discriminatory.

The paradox is that although all children can access education, a significant proportion of them cannot successfully remain in the system. *Primary education fails 30 to 40% of all children every year.* The average failure rate on the CPE examinations over the last five years was 35.6%. Access to ‘mainstream’ secondary education is still ‘bottlenecked’.

**A QUICK EVALUATION OF DROP OUT, TRANSITION AND ACHIEVEMENT AT PRIMARY LEVEL & SECONDARY LEVEL**

Compared to other countries, the drop out rate in all grades/standards is 1.7%. This is relatively low as indicated by table 2.

<table>
<thead>
<tr>
<th>Country</th>
<th>% Dropouts, all grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>15.10</td>
</tr>
<tr>
<td>Madagascar</td>
<td>66.40</td>
</tr>
<tr>
<td>Mauritius</td>
<td>1.70</td>
</tr>
<tr>
<td>Senegal</td>
<td>40.90</td>
</tr>
<tr>
<td>South Africa</td>
<td>42.60</td>
</tr>
<tr>
<td>Zambia</td>
<td>34.80</td>
</tr>
<tr>
<td>World</td>
<td>13.60</td>
</tr>
</tbody>
</table>

Source: Report (August 2006) by ADEA, entitled “Initiating and Conducting an Experimental Peer Review Exercise in Education in Africa”

Table 3 shows the number of school candidates who took the CPE examinations and the results.
Table 3: Number of candidates examined at CPE and the results.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number examined</th>
<th>Percentage pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>26 388</td>
<td>64.3</td>
</tr>
<tr>
<td>2000</td>
<td>28 058</td>
<td>66.4</td>
</tr>
<tr>
<td>2001</td>
<td>29 120</td>
<td>65.3</td>
</tr>
<tr>
<td>2002</td>
<td>27 842</td>
<td>64.9</td>
</tr>
<tr>
<td>2003</td>
<td>27 510</td>
<td>62.6</td>
</tr>
<tr>
<td>2004</td>
<td>27 332</td>
<td>63.0</td>
</tr>
<tr>
<td>2005</td>
<td>27 117</td>
<td>64.9</td>
</tr>
<tr>
<td>2006</td>
<td>27 771</td>
<td>65.0</td>
</tr>
</tbody>
</table>


The average pass rate over the years 1999 – 2005 is 64.5%. Over the years, the fluctuations in the percentage of candidates who passed the CPE have been very small. The low pass rate at the CPE, results in a low transition rate from primary to secondary education. It is a strong indicator of the internal efficiency of the sector. Table 4 shows how the transition rate for Mauritius compares with other countries. The transition rate is only 63.2%.

Table 4: Transition rate for Mauritius compared to other countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Transition rate to secondary education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>96.1</td>
</tr>
<tr>
<td>Madagascar</td>
<td>55.0</td>
</tr>
<tr>
<td>Mauritius</td>
<td>63.2</td>
</tr>
<tr>
<td>Senegal</td>
<td>39.2</td>
</tr>
<tr>
<td>Seychelles</td>
<td>98.8</td>
</tr>
<tr>
<td>South Africa</td>
<td>91.9</td>
</tr>
<tr>
<td>Uganda</td>
<td>40.6</td>
</tr>
<tr>
<td>Zambia</td>
<td>49.8</td>
</tr>
<tr>
<td>Thailand</td>
<td>91.7</td>
</tr>
<tr>
<td>World</td>
<td>90.8</td>
</tr>
</tbody>
</table>
In fact the Southern African Consortium Measuring Educational Quality (SACMEQ) conducted a study in 2003. It points out that:

- 26% of pupils in standard I did not enter Form I;
- 60% of the same cohort did not reach Form V;
- 73% did not reach Form VI

According to the Education Card 2005 statistics published by the Ministry of Education and Human Resources, the Gross Enrolment Rate at secondary level (academic and pre-vocational) stood at 73% in 2005.

A high level of participation in the education process is important but this is not sufficient. The World Declaration for All emphasizes the importance of ‘what people learn as a result of participation’ is more important. This implies reducing the rates of dropouts/failures. This depends on the quality of teaching and learning. One key determinant is the quality of the teaching force. Learning is assessed in terms of proficiency acquired out of the teaching.

A quality teaching force should be able to:

- teach mixed classes;
- deal with complex language issues;
- be sensitive to social cohesion;
- adapt to different learning styles.

Table 5 gives details about teacher qualifications in the secondary sector. Only 64.6% of the teachers are degree holders for the academic stream.
Table 5 - Qualifications of teaching staff in secondary schools (2004)

<table>
<thead>
<tr>
<th></th>
<th>School Certificate or equivalent</th>
<th>Higher School Certificate or equivalent</th>
<th>Certificate or Diploma</th>
<th>First Degree</th>
<th>Post-Graduate</th>
<th>Not Stated</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>261</td>
<td>829</td>
<td>1,167</td>
<td>3,589</td>
<td>545</td>
<td>5</td>
<td>6,396</td>
</tr>
<tr>
<td>Pre-vocational</td>
<td>50</td>
<td>346</td>
<td>75</td>
<td>99</td>
<td>6</td>
<td>2</td>
<td>578</td>
</tr>
</tbody>
</table>

Source: Report (August 2006) by ADEA, entitled “Initiating and Conducting an Experimental Peer Review Exercise in Education in Africa”

For the prevocational stream only 18.2% of the teachers are degree holders. The quality of education and learner achievement depends on the competence and motivation of teachers in an environment conducive to learning.

In his article on Schools at the Centre of Quality in ADEA Newsletter, Special Issue – Biennale, January – March 2006, Adriaan Verspar, ADEA Consultant, shares his findings and recommendation regarding effective schools following studies conducted in African countries. He stresses

- that good learning outcomes are associated with teachers who plan for teaching, put into practice what they have learnt (particularly in-service courses);
- the focus on teacher learning processes and how to improve them;
- the key roles of head teachers in monitoring learner performance and teaching practices.

We cannot under-estimate the critical importance of the continuous professional training/development of teachers and head teachers/rectors/managers at all levels in the quality of teaching and learning outcomes.

**Tertiary Education**

Students who complete the HSC successfully proceed to tertiary level education. The formal entry requirements for tertiary education is HSC/2 A levels. Students either resort
to the local (public or private) providers or overseas providers depending on the programme of study and the resources available.

The report (Page 103 Para 264) by ADEA, entitled “Initiating and Conducting an Experimental Peer Review Exercise in Education in Africa” August 2006) notes

“Over 50 % of the high school graduates are still struggling, unsuccessfully to have access to local public institutions. All the initiatives taken since the early 2000 to increase opportunities in this area have proved to be insufficient to meet demand”.

Despite considerable progress, access to tertiary education is still limited. According to the document “Participation in Tertiary Education” published in June 2007 the Gross Tertiary Enrolment Rate (GTER) stood at 34.1% in 2006. The GTER is calculated as tertiary education student population divided by the population aged 20 -24 the tertiary education student population includes

- student enrolment at local (public & private) and overseas institutions;
- students enrolled in tertiary education but not belonging to the age group 20 -24.

The public tertiary institutions are already being used at full capacity and further increase in number of students through the conventional system is unlikely. The rapid transformation of Mauritius into a knowledge based economy presents a number of other challenges.

**SOME OF THE CHALLENGES**

Education is the key means for social mobility and economic production. Mauritius largely relies on its people as its key resource. It cannot afford to lose significant proportions of its human capital if it wants to compete as a knowledge society in the global market.

At this stage of development, if the country wishes to participate successfully in a knowledge-intensive, technology driven, global economy, it requires a well-educated and trained workforce that is
innovation receptive.
- capable of adapting to changing environment.
- characterised by problem-solving minded people with a predisposition to lifelong learning

The hurdles in the transformation of Mauritius into a knowledge based economy include

- **Weaknesses in the education system.** The present system is characterized by considerable wastage. 30-35% of the children leave primary school without the basic numeracy and literacy skills. This results in low transition rate of only (65%) from primary to secondary schools. Inadequate basic education means a weak foundation for the knowledge based economy. Inequity and exclusion are also other features of the system. There is insufficient provision for children with special needs.

- **Inadequate provision for pre-service and in-service training of teachers, head teachers, rectors/managers:** There is no provision for pre-service training for all secondary school teachers. Some of them get the opportunity to follow in-service training programmes. There is no mechanism for on-going training in this sector.

- **Inadequate provision for tertiary education and lack of enabling framework for lifelong learning:** Our contemporary situation is characterised by

  - globalisation and the international competition that goes with it;
  - the swift evolution of knowledge and its swifter diffusion through the rapid development of information and communication technology (ICT);
  - modern aspirations towards a better quality.

All these features make lifelong learning a necessity. Diplomas and degrees gained between the ages of 18 and 25 is no longer an employment passport for life. Employability is becoming a concern for everyone. The economy has its changing requirements, and we must realise that training stays in line with employment prospects. This implies meeting the diverse needs of adults – not only the traditional clientele and until now under-represented in tertiary/further education. This clientele suffers from three handicaps:
- **economic** (in the case of those who need to find a place in the job market),
- **psychological** (people who are shy of the school system: many will have left it after failing in some way);
- **academic**, since they do not have the normal qualifications for access to tertiary/further education.

Thus the new environment is characterised by a

- **Diversity of learners**: The learning experience to be provided is not be limited to those between five to twenty five years of age, but will be of potential interest to all individuals at all stages of their lives. This includes women tied to the home, the physically disabled or even old age people who have retired.

- **Diversity of goals**: The learners choose to study for a variety of reasons and objectives. They decide what they want – whether for skills upgrading or intellectual development.

- **Diversity of contexts**: Full-time education within time-tabled constraints is accessible to only a few. For many participants learning must take place at a location and at a time of their choice.

If Mauritius wishes to participate fully in this knowledge-intensive, global economy, it must be able to produce sufficiently large numbers of scientifically and technologically-literate, innovation receptive, highly adaptable and problem-solving minded people with a predisposition to **lifelong learning**. This must be done within an **accelerated timeframe**. Lifelong learning, the indispensable key to the twenty-first century, now requires education/training institutions to rethink/review their structures, modes of functioning and attitudes.

**RESPONDING TO SOME OF THE CHALLENGES**

The potential barriers to a smooth and rapid transition to a knowledge based economy are due to a number of factors. One of them is the inadequate knowledge base and
inability of the present system to cope with the demands of the knowledge based economy.

The knowledge based economy requires that all educational/training processes should be both development oriented and learner-centred. The focus should be on capacity building/capacity strengthening of every citizen at every level. The conventional modes of delivering education and training are not able to respond to this challenge. Thus the education/training package should be flexible, of high quality and accessible at affordable cost.

This paper proposes Open Distance Learning (ODL) as a tool to address central issues like access, equity, inclusiveness, relevance and quality. What is Open Distance Learning?

OPEN DISTANCE LEARNING

Open Distance Learning combines two forms of education – open and distance. Distance education (DE) has been defined by scholars like Moore, Keegan, Peters and Holmberg. The major features of DE as identified by Keegan include the separation of the teacher and some or all of the learners, use of technology, provision of two-way communication, participation in the most industrialised form of education and privatisation of learning. (Jenkins & Koul, 1991:P27).

A definition of distance education is provided by Ian Mugridge (1991). He states that it is

"a form of education in which there is normally a separation between teacher and learner and thus one in which other means (the printed and written word, the telephone, computer conferencing or teleconferencing, for example) are used to bridge the physical gap”.

A simpler definition, more open to expanded possibilities, would be that distance education should provide whatever educational opportunities are needed by anyone, anywhere, at any time.
The South African Department of Education (DoE) 1995 White Paper on education and training defines ODL as

“an approach which combines the principles of learner-centredness, life long learning, flexibility of learning provision, the removal of barriers to access learning, the recognition of prior learning experience ….and maintenance of quality assurance over the design and support systems”.

One of the goals of ODL is to transcend the barriers of time and space between the teacher and the learner. ODL promotes learner-centred activities and flexible learning and teaching arrangements. This enables learners to learn at different times, in different places and in different ways. The hallmark of these approaches is the flexibility in which the approaches adapt to local conditions to meet the education and training needs of the learners and also the needs of the country. ODL offers a second chance (multiple chances) to those who missed earlier opportunities. Learners can earn and learn at the same time. Moreover, another obvious benefit of ODL is that it can provide access and opportunity to learners who cannot obtain education on account of various constraints.

Thus ODL is characterized by two factors:

- It’s philosophy – that aims to
  - remove barriers to education and training
  - allow individuals to learn what they want, when they want and where they want

- It’s use of technology to mediate learning, for example

  - Printed materials
  - Radio
  - Audio/video cassettes/CD ROMs
  - Information and Communication Technologies (ICTs).
USING ODL TO MEET THE CHALLENGES

Many international agencies are advocating the use of ODL to respond to the growing and diverse education/training needs. There is no doubt that ODL can be used as a major strategy to increase access, raise quality and ensure cost-effectiveness. ICTs have a critical role here. They are fast 'globalizing' two key functions of tertiary education institutions, notably, the provision of tertiary education and the creation of knowledge.

Effective use of Information and Communication Technologies (ICT) has the potential to

- bridge the distance between the learner and the teacher/tutor;
- transcend the barriers of time;
- increase access to quality education;
- offer flexible schedules and inclusive delivery mechanisms;
- bring down the cost to the individual learner.

The correct choice of media/technology is critical in the design and delivery of the right programmes for the right individual for the right outcomes. E-learning can contribute towards meeting the education and training needs of the knowledge based economy provided we are guided by strong pedagogical/andragogical principles.

A concept that has gained currency nowadays is e-learning. Aldwyn Cooper quotes the European Union definition of e-learning in his article “The Challenge for e-learning” in ICDE Open Praxis Volume 1 2004. It is

“the use of new multi-media technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration”

E-Learning can play a key role in

- facilitating adult learning projects;
- developing global learning platforms;
- experimenting with various technologies in e-learning.

The advantages of e-learning include
• 24/7 accessibility
• being flexible in time and location;
• ease of update and the ability to adjust to individual learning pace;
• self-management, motivation and interactivity;
• consistent quality.

Aldwyn Cooper also quotes the CEO of Cisco Systems, John Chambers who said

“there are two great equalizers in life, the Internet and education. By combining the two, e-learning will be the great equalizer by eliminating the barriers of time, distance and socio-economic status; individuals can now take charge of their own lifelong learning”

However, there is a caution! We cannot rely blindly on technology to solve our problems. We need to ensure the right

• choice of technology;
• design of the education/training programmes in line with learner needs;
• attitudes and the right management and delivery systems with the right learner support.

Training of teachers: Training of teachers is an important area where ODL can make a major contribution. Teachers perform a wide range of activities that is subsumed under the general heading of ‘teaching’. These include

• planning and designing,
• demonstrating, guiding and telling;
• questioning, testing and recording;
• motivating, criticizing and even learning
• action research

Many of these aspects of a teacher’s role require significant expertise and the making of finely tuned and sensitive judgments based on both breadth and depth of experience. A new relationship needs to develop between learners and teachers in the knowledge
economy as education becomes more learner-centered, with individuals managing their own learning. Teachers become facilitators of learning. This requires continuous learning. Teachers must develop their own skills for the knowledge economy, including digital competence.

Considerable progress has been made in Mauritius in the use of ODL to train teachers but much more still remains to be done. On-going teacher training is crucial at pre-primary, primary and secondary levels to cope with the emerging complexities – to address issues related to equity and inclusiveness, improve quality of outcomes, reduce dropouts/failures. Training must be provided rapidly and regularly if we wish to

♦ bring about quality improvements at all levels;
♦ make the curriculum more relevant to our needs;
♦ increase the efficiency of the system;
♦ keep pace with the changing environment;
♦ promote a learning culture.

Continuous professional development opportunities can also be extended to Head teachers, Rectors/Managers of schools through ODL. Even at tertiary level, pre-service and in-service courses for academics would also help.

**Using ODL to improve access and equity at tertiary levels:** In the move towards a knowledge based economy there is an urgent need to expand access to tertiary education. Many countries making effective transitions to knowledge-based economies are substantially increasing access to tertiary education.

The Mauritian Prime Minister’s message on the occasion of the celebration of 40th anniversary of the country’s independence indicated the intention of Government to double the tertiary enrolment rate over the next ten years. This is a key requirement for the knowledge based economy.

The challenge faced in tertiary education is the provision of high quality tertiary education to the greatest number of citizens, at the lowest cost. In the process of expanding access and improving quality, institutions are also challenged to make tertiary education affordable. ODL enabled and delivered through a mix of media/technology can
address the issue of access to quality tertiary education at affordable costs and provide new and alternative ways of learning and capacity building.

**Using ODL to promote equity and inclusiveness - a second chance/multiple chances** - A knowledge society requires the participation of every body. Many people could not benefit from the education/training opportunities in the past for various reasons. They can now be brought into the mainstream of national development by upgrading their knowledge and skills through ODL. Different persons have different abilities. They cannot follow the ‘fast’ track. Some may not have had the opportunity to acquire the desired level of education earlier. Now they demonstrate the desire for education so that they can contribute to national development more forcefully. They comprise housewives, out of school youth and all those who have not been able to benefit form earlier opportunities for education.

**ODL can also be used to cater for learners with disabilities**

Persons with special needs must be integrated into the knowledge economy. This entails ensuring that attempts are made to provide these learners with the appropriate learning environment. People with physical and mobility difficulties, hearing impairments, visual impairments, specific learning difficulties can learn and continue to learn through ODL because of the openness, flexibility and the use of ICT ideally equipped to address the issue of inclusion of disabled persons in higher education. In this case the learning objects/materials need to be designed appropriately – Braille, colour contrast texts, voice recordings, etc.

**ODL for senior citizens**

Improvement in life expectancy to 75.68 years for female and 68.92 years for males means that Mauritians are active for longer. According to projections of the Central Statistics Office, by the year 2016, 22.7% of the population will be 60 years of age and above. Even upon retirement, they can be kept intellectually stimulated. Again specially designed ODL programmes can be used to achieve this objective. What is important is the right ODL programmes designed for the right individual for the right purpose. Denying these people an opportunity to education means excluding them from the mainstream of development.
The following extract of a note from one of the learners of IGNOU published in the IGNOU Newsletter Volume 17 Issue 45 of October 2007 is relevant here:

Madam

As a retired Central Government Servant and senior Citizen aged 76, I am continuing the MBA programme – I have completed 18 of the 21 courses and continuing my learning, want to do the Degree in Intellectual Property Right and PhD in HRM. I thank you and all your colleagues and others at IGNOU for the flexible and innovative system of yours suiting the learners place, pace and time(and age too) and myself fortunate to be one of your students who have benefited from your great cultural service

Battu Ganesh Sharma
Bangalore

Employability of the workforce - Using ODL to provide opportunities for lifelong learning (LLL)

In his introduction to the COL/UNESCO publication “Perspectives On Distance Education Lifelong Learning & Distance Higher Education, John Daniel, President of the Commonwealth of Learning writes

“The term “lifelong learning” is now part of the vocabulary of the industrialized world. It describes the need for people to continue their education and training throughout life because they will face multiple careers in changing economies and enjoy longer lives in evolving societies....”

LLL is a method of organizing and delivering learning in a manner that is intended to be learner-centric. It encompasses learning over the entire life cycle and all learning systems (formal, non-formal, and informal). It is increasingly important in the global changing economy.

The rapid continuous knowledge explosion and the disappearance of old fixed patterns of employment result in learners increasingly demanding a type of education that allows
them to update their knowledge/skills whenever necessary and to go on doing so throughout their working lives. Creative abilities are more and more important to face the challenges of the emerging knowledge economy and information society.

Education is 'living' and not 'preparation for life'. In the old school of thought, we could go to school to prepare for a future life and once we enter that life, stop learning and apply what we once learnt even when shifting contexts render it obsolete. LLL is not new, but it needs to be brought back to the forefront of our thinking about 'education as living' or better still 'learning as living.'

The Pay Research Bureau (PRB) recently published its report (May 2008) concerning its recommendations regarding the conditions of service of public officers in Mauritius. The report recommends 40 - 60 hours learning opportunities annually to each officer. Implementation of this recommendation can pose a serious problem unless flexible/ODL strategies are integrated in the education and training system.

Many organisations now recognize the need for 'just-in-time' education and training programmes. People need to change jobs several times and must learn to remain employable. The motto should be LLL for lifelong employability! LLL provides both human and social insurance against the uncertainty and unpredictability of the modern world.

**ODL AND THE CHALLENGES FACING SMALL STATES**

**Quality of programmes and credibility of providers**

Many ODL institutions have progressed quickly in the provision of tertiary education, with their cost-effectiveness, economies of scale, state-of-the-art delivery methods and ability to reach out to a wide international clientele. One example is the IGNOU. However, some people point out the drawbacks of such institutions as compared to the conventional campus-based institutions. They complain about lack of face-to-face contact between student and teacher, erosion of traditional academic values, loss of a sense of community and shared tradition, technological development at the expense of pedagogical standards and an emphasis on quantity over quality.
One set of challenges concerns the area of regulatory mechanisms and recognition of qualifications obtained through ODL for certification. Globalisation of education has brought about an erosion of the traditional role of governments in this sphere. Issues as quality, credibility and responsibility are often blurred. It often becomes difficult to monitor the quality of a particular programme or the trustworthiness of certain non-providers. Consequently they are unable to inform citizens on the quality of certain such programmes. This causes some confusion about the value of the degrees and the certificates in the minds of students and potential employers.

Another set of challenges concerns the availability of the professionals to

- design/develop the ODL instructions;
- manage the delivery and the learner support aspects of the ODL programmes;
- work within the philosophy of ODL. This is crucial for the quality of the programmes.

The use of ICT helps in the delivery and management of ODL. However, the right choice is instrumental in the success of ODL programmes. While improving the learning effectiveness, the technology must be user-friendly and accessible to the learners. Quality learner support is crucial in ODL. It is a real challenge to design learner support system that is responsive to diverse learner needs.

The costs of ODL can also be a tricky issue. People tend to think that ODL is always cheap. Considerable costs are associated with the design and development of ODL programmes. ODL programmes can become more affordable as we achieve economies of scale. But this may not always be possible for small states with a small population.

**HOW CAN SMALL STATES DO IT?**

One way to address the issue could be the right collaboration and partnerships among institutions within the country and also among the different states. This would enable the

- sharing of expertise, resources and programmes;
- adaptation/ adoption of existing ODL programmes;
- enhanced quality of programmes;
- collaborative design and development of ODL programmes;
- cost-effectiveness of the ODL provisions by achieving economies of scale;
- development of quality standards and accreditation mechanisms and arrangements for recognition and credit transfer.

The COL has facilitated the creation of the Virtual University for Small States of the Commonwealth (VUSSC). It is a collaborative consortium rather than a new institution. While they can develop courses/programmes virtually, the courses/programmes can be delivered through a mix of methods – distance, face-to-face and online. The members can create open educational resources (OER) applying systematically quality assurance processes.

The concept document (May 2008: Page 11) for the ‘Transnational Qualifications Framework (TQF) for VUSSC’ proposed by the Commonwealth of Learning notes that

Potential benefits of a TQF noted by small states include portability of qualifications; improved ease of credit transfer; increased stakeholder confidence; improved networking between quality assurance and qualifications agencies; and the establishment of appropriate benchmark standards for the recognition of overseas distance-education programmes.

The quality of the enabling environment is arguably the single most important factor in stimulating the use of information technologies on a broad scale in any country.

The words of Dr G. Dhanaragen, the President of COL (in 1999), during his visit to Mauritius between 7 – 11 August1999, are inspiring

The delivery of quality distance education to learners anywhere in the world is limited only by our imagination. We have the knowledge, experience and skills to bring together the people and partnership. Today we have the technology. What we need now is the vision to make it happen.
The bigger picture is increased educational opportunities for everyone, accommodating different situations and needs to achieve quality outcomes.

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NEW APPROACHES TO QUALITY ASSURANCE IN THE CHANGING WORLD OF HIGHER EDUCATION

Maria Jose Lemaitre
President RIACES

We continuously speak about change. And there is no doubt that the world is changing. After living for 500 years in the shadow of Columbus and his discovery that the world was round, we have been told that it is now flat.

Changes of that magnitude evidently imply changes in higher education, and these should also mean that quality assurance processes and procedures should also change. This is what we expect to discuss during this conference: How can QA keep its relevance, and how it can effectively make a difference in the quality of higher education institutions, their operation, their programs and in general, in the capacity of higher education to answer to the current and future needs of society, at the local, national and regional levels.

Some of the main social forces that have made the world a flatter place also have an influence on higher education. The most significant ones are the growing need for highly skilled and educated workers and the widespread view of the link between educated manpower and economic development (Gibbons, 1998); the expansion of secondary education systems; increasing links to the international system, with mobility and outsourcing becoming important factors in the perceived attractiveness of higher education (Friedman, 2008) and “global institutional changes linked to the rise of a new model of society: increasing democratization and human rights, scientisation and the advent of development planning (Schofer and Meyer, 2005).

Trends and challenges of higher education

Higher education has experienced significant changes from a social perspective. From a relatively encapsulated situation, centered in universities, focused on theoretical and conceptual teaching and learning in the arts, sciences and humanities and in advanced research and scholarship, it has moved to center stage in most countries. It is offered by different providers, to a large and diversified student population, in a wide range of teaching, research, consultancy and service functions.

A review of over twenty countries carried out by OECD identifies a number of major trends in higher education, which are briefly outlined in the following pages. One of the more significant one, however, is summarized in the name of the report: Tertiary Education for the Knowledge Society. The expansion of higher education systems, the diversification of provision and the increased heterogeneity of the student body has made it necessary to open the field from the traditional view of higher education to the wider one of tertiary education, which is meant to reflect the growing diversity of institutions and programs. (OECD, 2008; Vol 1, 25). While this widening view of tertiary education is necessary, it is also important to distinguish tertiary education from post-secondary education, which covers a far wider range of programs, with very different requirements and characteristics.
The main trends and contextual developments identified by OECD are the following:

- **Expansion of tertiary education systems.** The student population has doubled between 1991 and 2004, from 68 million to 132 million students, with the most significant increases in East Asia and the Pacific, Sub Saharan Africa and South and West Asia. North America and Western Europe are the only regions of the world where growth is below average, but this can be explained because of the high coverage already achieved in those regions. Most OECD countries show participation rates of over 50% for a single age cohort, and in other countries, participation rates are also increasing, although at a slower pace. An interesting comment in the OECD report is that enrolment seems to increase more slowly “in ethnically and linguistically diverse countries, suggesting the competition between different status groups leads to under-representation of particular groups”.

- **Diversification of provision.** Diversification has different faces: emergence of new institution types, multiplication of educational offerings within institutions, expansion of private provision and the introduction of new modes of delivery. Among these, the growth of non university sectors is recognized by OECD as one of the most significant structural changes in recent times. This in part comes as a more innovative response to the increasingly diverse needs of the labor market, but also as the result of regional development strategies for increasing access to tertiary education, or as a way to educate a larger proportion of students at a lower cost, through the introduction of short programs. However, not all these new programs are offered in different institutions. In many cases, provision is diversified within institutions; thus, traditional universities are expanding their range of programs, including short cycle or vocational programs.

  Private provision has also expanded, and some countries (such as Korea, Japan or Chile) have over 70% of their students enrolled in private institutions.

  Finally, more flexible modes of delivery are emerging everywhere. Distance learning, online delivery of standard courses in face-to-face programs, small seminars and interactive discussions, part-time courses and module based curricula, continuing education and non-degree courses are all new means to address the new needs and demands of students and the labor market.

- **More heterogeneous student bodies.** The expansion of the student body means not only more students. It certainly means different students: Age, gender, qualifications, cultural capital and expectations are diverse and make it difficult for many tertiary education institutions, used to dealing with traditional students (mostly male, young, highly qualified and aspiring to an academic or professional career) to adjust to new needs and demands. A large proportion of these students are the first generation in their families to reach tertiary education, and the lack of social networks to support them poses also new challenges for tertiary education institutions. These students have different learning needs, which mean new curricular and pedagogical requirements, but also the need to provide a different learning environment, which must take into account the different perspective these students bring to their educational experience.

- **New funding arrangements.** Increasing demands for public funding from multiple sectors (health, environment, primary and secondary education, others) make it
necessary to prioritize the allocation of resources and reduce the amount that
governments are willing to dedicate to higher education. In this context, public
funding tends to be linked to policy objectives, through program based targeted
funding, competitive bidding or performance-based funding. In many cases, the
allocation of public funding is linked to indicators of effectiveness or efficiency, or
to the outcomes of self assessment and external review processes. At the same time,
many countries are increasing the proportion of resources allocated for student aid
programs, through grants but increasingly through repayable loans.

The need for new sources of funding means a significant increase in the proportion
of resources coming from private entities, primarily through the introduction or
increase of tuition fees and also through the commercialization of research and
institutional facilities or staff.

- **Increasing focus on accountability and performance.** Most countries have
  witnessed the development of formal quality assurance systems. The decline in
  public credibility of higher education identified by Peter Ewell (CHEA, 2008) as a
  significant change in the environment of higher education is not just a US
  occurrence, but something that is apparent in many countries and that is closely
  linked to external mechanisms for accountability. The expansion of tertiary
  education systems, their increased diversification, the need to legitimize the use of
  public funds and increased market pressures are all factors that subject higher
  education to close scrutiny, and its quality, effectiveness and efficiency are no
  longer taken for granted, but must be demonstrated and verified.

  Of course, concerns for quality as well as the quality assurance of higher education
  by state authorities, institutional leaders or higher education institutions themselves
  are by no means new practices, but they were traditionally restricted within the
  higher education system itself. What is new is the social relevance granted to the
  quality of higher education, and therefore, the need for higher education institutions
to find new partners and develop links the social and productive environment, to be
able to identify and find answers that are relevant vis a vis societal needs.

- **New forms of institutional governance.** The OECD report recognizes changes in
  the leadership in TEIs as one of the significant changes: the need for improved
  management and for a clear demonstration that institutions effectively offer ‘value
  for money’ means that leaders are increasingly seen as managers or entrepreneurs.
  While managerialism is strongly criticized in some contexts, it seems unavoidable to
develop governance schemes that increase the capacity of the institution to take into
account internal and external stakeholder needs, to develop new partnerships and
find new sources of income, to enhance the prestige of the institution and to be able
to compete in an increasingly complex sectoral context.

- **Global networking, mobility and collaboration.** The increasing
  internationalization of tertiary education has different aspects worth mentioning.
  One of them is the mobility of academics, students and professionals, which in turn
is often related to the internationalization of curricula, at least in some areas such as
engineering, business and management studies, information technology and
biotechnology. Another is the mobility of education itself, in the guise of
transnational or cross border tertiary education, either in face-to-face programs or
through e-learning mechanisms. Finally, international collaboration and networking
between institutions in different areas of teaching and research is also a significant factor in the organization of tertiary education in many countries.

**Some challenges for higher education**

It is therefore easy to see how tertiary education is subject to strong pressures for change. It is still required to bring in and work with highly qualified students (*the best and the brightest* of a social generation) and train the high level professionals, researchers, scientists each society needs. And while this poses some difficulties, and certainly requires adjustments, this is what universities know how to do, and do well. At the same time, it is required to accept and train a much larger population of students, which bring different life experiences, new aspirations, usually lower academic qualifications, and need to develop areas and skills that have not been part of the usual university curriculum.

Most of these changes and challenges impact on institutional management. The need to identify clearly the purposes and priorities of each institution, to find sources of funding and at the same time protect some measure of institutional autonomy, the pervasive requirement for accountability and the impact of globalization are all aspects that require a strong managerial capacity and in many cases, a revision of common practices and procedures.

If we focus on teaching, it becomes clear that this is a function that must be redefined in order to answer to the needs of a varied population of students. While there are important ways in which the demands of highly qualified, elite students press on institutional decision makers and require adaptations and change, the following section will focus on the new population of students, those that are mostly a new generation, with less skills and new needs (which they are not always able to translate into demands).

In the first place, there is a need to redefine the organization of teaching. This means changing the structure of academic offerings, to provide courses that take into account different needs: short cycle programmes, modular arrangements, teaching linked to labour market requirements, together with traditional programmes in new packages, which make it possible to answer to these different needs while maintaining the quality of the learning process.

A second aspect that must be taken into account is the need to adjust to new curricular requirements. These take many forms, of which we shall mention only two:

- Many of the students that enrol in higher education come from the poorer schools in their educational systems, and have a reduced cultural family and social background (or at least, a non traditional cultural background). This means that in many cases, they do not have the expected basic qualifications in terms of communication skills, reading, writing and numeracy proficiency, knowledge of a foreign language or even a basic knowledge of historical or social events. The curriculum for a given programme usually takes these aspects for granted, and does not pay attention to their development, but they can no longer be ignored and must be factored in at the moment of designing and developing new curricula if admission is to be expanded.
The changes in the labour market and in the career paths of professionals emphasize the need to develop the curriculum taking into account the actual competencies that graduates will need to master at the time of graduation. At the same time, it is essential that the curricular arrangements provide for greater flexibility, the capacity to re-define career paths and continue learning through life and the development of general and transferable skills. These are not quite compatible requirements and therefore, require an important effort to balance them and to determine their relative weights in the curriculum.

Thirdly, new pedagogical approaches must be developed. On the one hand, the traditional approach, which implied that teaching meant mostly the transmission of knowledge and the provision of information, has been superseded by the wealth of information readily available even to underprivileged students. Current requirements focus more on the need to provide a basic structure for the available information, which makes it possible to select (and discard) information on the basis of a critical judgement on its relevance to the needs at hand. Students with lower qualifications require teaching addressing their more pressing needs, in order to enable them to carry out a more autonomous learning process later on. Unfortunately, in many cases, these students are subject to a traditional and secondary school methodology, more concerned with helping them memorize certain contents than to develop their capacity for independent learning. All this means a pedagogical recycling, which many institutions are not in a position to offer and which is not easily accepted by many teachers in higher education.

From an institutional perspective, the need to accommodate increasing numbers of students changes the balance of their functions and makes teaching the central business of the institution. This has been the case in many higher education institutions for years, but the traditional ideology insists on the pre-eminence of research over teaching. While this is still the case in selected institutions in most countries, the majority of tertiary education institutions are really first and foremost teaching institutions. Therefore, there is a need to re-value teaching as a critical function, and adjust accordingly the methods for the development, assessment and promotion of the academic staff. If teaching occupies a central role in a TEI, then the academic organization – traditionally focused on the development of disciplines – must take this into consideration. The way in which resources are distributed must also reflect this emphasis, as well as the mechanisms for their allocation. This includes hiring and investment policies, academic development strategies, the content of research and studies, and the methods and criteria used for the evaluation of academic staff.

Most of these challenges affect the management decision within TEIs. One of the first issues that need to be addressed is the specification of the institutional mission: most mission statements look quite similar, even when they refer to very different institutions. For example, the growth in the enrolment means that in most countries, a large proportion of the TEIs will actually be teaching institutions, at the undergraduate level, reserving research and graduate programmes to a small number of more consolidated universities. But this is hardly acceptable to the more traditional academic community, and therefore, most mission statements replicate those of these consolidated institutions and assign great importance to the production of knowledge and to the development of high level researchers and scholars, even when they have no human, financial or academic resources to do so.
Thus, it is important that each institution is able to determine which are its main functions, and then match its organizational processes to the adopted decisions. This includes the identification of the ways in which these functions will be carried out, who are the beneficiaries and users of the services that the institution will provide, and how the institution will be able to determine whether it is adequately fulfilling its mission.

Management must also consider the impact of its funding sources. For years, many higher education institutions enjoyed the 'privileged autonomy' that comes from guaranteed public funding, and very little – if any – regulatory actions from the part of the government. The reduction in public funding, plus the demand for teaching larger numbers of students, makes institutional managers highly dependent on a variety of funding sources, which may affect the autonomy of their decisions. In fact, the need to obtain the necessary funding may direct institutions towards decisions that not only are outside their stated purposes, but in some cases, detract from them. In those countries where tuition paid by students covers a significant part of the institutional budgets, the interests and demands of students may strongly affect the decisions on what programmes to offer. This may be necessary, but in order to make it a positive influence on the development of an institution, it must be put in perspective within a long term vision and mission, which may, in some cases, even lead to the rejection of a proposal that is contradictory to the stated purposes of the institution.

This of course has a strong impact in the growing requirement for accountability. Assessment is moving from a revision of institutional inputs to an evaluation of outcomes against stated purposes, and from a mostly external exercise to the development of internal quality assurance mechanisms. These internal quality assurance mechanisms must become a part of the management and decision making schemes within an institution, in order to help them work constantly towards increasing levels of quality – understanding quality as both the achievement of the institution's stated purposes and the ability to meet national (and sometimes international) quality standards.

Institutional management must also take into consideration the issues that come from the blurring of national borders, the increasing mobility of students, academic staff and professionals, both from the point of view of developing cooperative mechanisms and establishing effective alliances and partnerships both within the country and with foreign institutions, and also from the need to compete not only with national offerings, but also with international or transnational higher education, which comes into the country sometimes with very little regulation.

**Implications for quality assurance**

We constantly repeat that quality is the responsibility of tertiary education institutions, and that quality assurance arrangements only make sense when they contribute to the quality of tertiary education. We also agree that all effective quality assurance arrangements must take into account the context, the needs and the stage of development of the tertiary education system within a given country.
Quality assurance systems have an added advantage over individual tertiary education institutions: they have a cross sectoral view, provided by their constant interaction with programmes and institutions across the country, and by their exchanges with other quality assurance agencies in other countries. Thus, it is easier for them to detect trends, both positive and negative within a TE system.

At the same time, most quality assurance systems are extremely conservative. This is, in part, a consequence of their need to work with the more consolidated and better institutions within the country, and with the selection of the more prestigious academics to act as their external reviewers. It is also a consequence of the prevailing ideology, which tends to identify the more traditional features of higher education with quality (more academic staff with doctoral degrees, more full time faculty, more books in the library). But in many cases this makes it difficult to operate in a diverse system, which must change the focus or the approach of tertiary education towards a less traditional view.

There are many reasons why increased diversity is seen as a positive development: it makes it possible for tertiary education institutions to address a wide range of student needs and demands, as well as the varied requirements of the labor market through institutional specialization; it stimulates social and professional mobility, and it is assumed that it will provide opportunities for innovation. However, Frans van Vught argues that there are strong forces against diversification, mainly those arising from centralized and uniform governmental policies, imitative behavior by lower status institutions or academic conservatism (van Vught, 2008).

All these factors may act through QA mechanisms, which – reasonably enough – establish strong entry barriers to the tertiary education system when trying to make sure that even the worse tertiary education institution or program in the country meets basic quality standards.

Therefore, it can be said that there is a real and present danger that QA systems, while ostensibly working towards assuring quality, may in fact, be making it difficult, if not impossible.

This is certainly a provocative statement. In the following section, we will look at some approaches that may reduce the risk of interfering with the development of better processes or decisions.

Quality assurance mechanisms are a means, not an end.

All QA practitioners know that the actual goal of QA is to help TEIs improve their processes and their outcomes. They also know that all assessment and accreditation processes should support and promote the developmental needs of higher education.

But QA practitioners and TEI members also know that in many cases, QA gets misled and tries to build tertiary education systems in its own image. QA is about evaluation, and evaluation is about power. It is easy to be tempted to define quality from a top-down position, and it becomes intoxicating when TEIs do as they are told, because they need to have a good report.
This does not help institutions to improve, or to take responsibility for the quality of their work. If the main concern of QA is really the quality of the service rendered, it needs to develop a much more humble approach.

It becomes essential to learn about the system, its features and the ways in which it is perceived by a wide range of stakeholders; to be in touch with international developments and learn both from the similarities and the differences, find out about the ways in which other QA agencies have dealt with similar problems, and be able to learn about good practices, without using them as 'recipes' to be adhered to.

It is necessary to recognize and validate different institutional models, and learn about the features that make them effective.

It is important to use a wide range of consultants and reviewers, in order to keep in touch with diverse disciplinary and professional approaches, to learn about innovative practices and not to lose contact with the more traditional and effective aspects of institutional practice.

**Standards and criteria must recognize different types of institutions**

As has been previously stated, standards and criteria tend to reproduce a traditional view of higher education, without recognizing that there are other quality indicators that can be used more effectively in different types of institutions. A typical example is that of academic staffing: many QA agencies insist on academic qualifications as a measure of quality, forgetting that in many cases (such as professional programs or new fields of knowledge) other qualifications may be much more effective. The quality of teaching staff is essential – the point is that there may be many different ways to identify this quality.

At the same time, some quality assurance processes are very rigid and apply the same standards and procedures to very different programs or institutions. A certain degree of homogeneity may be necessary (probably limited to the issues they cover), but it is important to adapt the procedures and the application of the standards to the actual purposes and characteristics of the programme or the institution. At the same time, the diversity of tertiary education makes it necessary to develop different definitions of quality, or at least, a definition that can be adapted to different circumstances.

**Standards should focus on expected outcomes, rather than on prescribing actions or focusing on the formal compliance with quantitative indicators**

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1 An interesting approach is provided by the following operational definition of quality, which focuses on two main aspects: external consistency, that is, the adjustment of the programme to the standards and criteria determined by the disciplinary or professional community in a given context. External consistency must be linked with internal consistency, that is, the way in which a programme adapts these external criteria and requirements to the priorities and the principles derived from the institutional mission statement. External consistency corresponds to the more common definition of fitness of purpose, which then becomes embedded in the institutional purpose, and is translated into quality as fitness for purpose. The combination of both makes it possible to ensure, on the one hand, the compliance with external demands, and on the other, the necessary specification provided by the characteristics of the institution that offers the programme.
The way in which standards are defined also may interfere with quality and the response from TEIs. When they are too prescriptive, they impose a preferred way of doing things, which does not generate a feeling of ownership from the institution. Prescriptive and/or homogeneous standards may not pay sufficient attention to significant differences among institutions, in aspects such as their target population, institutional principles, or disciplinary approaches, thus making it impossible for those institutions to develop responsibly in accordance to their stated purposes. A second risk is that of excessive formality or adherence to quantitative standards applied across the system.

Of course, it seems easier and more objective to determine a set of common indicators: x hours of math, x% of full time teachers, y% of PhD holders, etc. But formal indicators tend to push TEIs to make formal decisions, comply with the required number of hours of math, with the number of full time teachers or with the proportion of PhD holders, without paying sufficient attention to the underlying substantive issues. These – the need for students to acquire certain competencies, the availability of teaching staff and their commitment to the teaching tasks, or the need to ensure the appropriate qualifications in the academic staff – may be achieved in many different ways, but there is no room to discuss these other options, because the indicator is what ends up being measured, even if it does not apply to the specific programme being evaluated.

**QA processes require a continuous learning process**

Some quality assurance schemes tend to define their standards and procedures and then act as if they never needed to change and adjust to new conditions. A quality assurance process needs to be able to learn from its experience and, sometimes, to un-learn things that it used to do well.

If we recognize that higher education is an essentially dynamic operation, its quality cannot be assured with a static process. This means that close attention must be paid to possible changes, in the definition of quality, the criteria, the procedures, the mechanisms for self and external review.

Learning comes from a variety of sources: academic staff, external reviewers, disciplinary or professional stakeholders, technical staff within the agency, international exchanges, and this means that it is necessary to keep open eyes and ears at all times. In spite of everything that is done, mistakes will be made, and they should also be made a part of the learning process.

**Quality is the responsibility of TEIs, not of the external QA agency.**

Finally, all this comes to the realization that, as principles of good practice for external QA agencies stress unequivocally, quality can only be assured from within. Effective processes are those that, even in new and developing institutions, strive to help them establish self regulating policies, mechanisms and procedures. Work done with TEIs, rather than to TEIs, is what in the end will be most conducive to quality and, most important, to its continuous improvement.
So, what is a QA agency to do?

In the situation we have been describing, there is a strong need to develop a different approach to quality. Quality and quality assurance processes have focused on the need to improve the way in which things are done: better academic qualifications for teaching staff, stronger selection procedures for students, better laboratories, improved teaching and evaluation strategies. The time has come to do different things, and to do them in different ways: new modes of teaching, new types of programmes, new arrangements for part time students and part time academic staff, new alliances with external partners … there is a need for innovation, which is usually difficult for QA agencies to accommodate.

In graphic form, we can say that QA agencies are quite good at developing and promoting the left hand side of the table. They have difficulty operating on the bottom row, and of course, moving from the bottom left cell to the top right cell is a real challenge:

A different approach to quality

There are many things that an institution or program must improve, and self assessment usually provides good information about that. This moves the institution from the left hand bottom cell to the left hand top cell. There is improvement.

At the same time, self assessment may show that there are new issues to address, or that the current approach to some issues is not working properly. It is necessary to innovate, and to change the way of doing things. In many cases, there are no precedents within the

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2 Diagram adapted from Yorke, 1994
institution, and even if other institutions are working along the same lines, each institution must find its own way.

In most cases, trying out something new means that there is a period of temporary incompetence, in which even very proficient managers or academic staff do not perform as well as in the ‘old’ way. Most people have experienced this, when they switch from a car with manual gear to automatic gear, or when they have to use a new word processing program. It is probably much more likely to happen when a new curricular structure is being tried, or a new mode of teaching.

One of the most frequent questions asked of QA agencies is how they deal with changes: how to deal with a new curriculum? How to assess new admission policies? How to tell whether new pedagogical practices are effective?

When an institution or program which has just carried out such an innovation is externally reviewed by a QA agency, it is highly likely that it will be sanctioned, either because things are not working as well as they used to, or because it is still too soon to show effective results. Therefore, an institution wanting to receive a good report will most probably refrain from trying an innovation, unless it is certain that there is no external review in the horizon!

The new approach to quality that seems most appropriate takes this into account, and promotes innovation in spite of the fact that results may not be as good, or as effective as no change. It is not easy to do, but if an agency is aware of this problem, it will be able to find ways to do it. The important thing to keep in mind is that change is necessary, and that QA cannot limit it.

Developing institutional capacity for self regulation

In practice, it means promoting the institutional capacity for self regulation. Without this, there is a significant risk of reducing QA to an exercise in compliance: TEIs do what the QA agency demands, and then continue with business as usual. But if the goal is to promote quality, and help the institution not only to improve its operation, but also to be able to review its operation and make any necessary changes, then its ability for self regulation becomes crucial.

Thus, the quality assurance agency can begin by asking the institution about its purposes and goals: are they clear enough, and susceptible to translation into guidelines for decision making? Are the departmental and program's goals consistent with the institutional priorities? Does the institution know whether it is advancing towards achieving the stated goals and purposes? Are the changes being proposed based on sound assessment and planning?

The self assessment process should also be reviewed: participation, involvement of internal and external stakeholders, the degree of consensus on the identification of strengths and weaknesses, are all important indications of the level of commitment of the institution and the programme with its improvement. Reports not always manage to register accurately the richness of the self assessment report, and site visits are a useful way of going beyond the formality of the report.
Finally, a well developed improvement and development plan, realistic and verifiable, shows the capacity of the institution or the programme for self regulation – and that, in the end, is the most important outcome of the quality assurance process.

**Final comments**

Higher education is changing, and quality assurance processes and quality assurance agencies must change with it, or become irrelevant. If agencies don’t pay attention to the signs of the times, they will be left behind. For many institutions, quality assurance is just a requirement that must be met if they are to receive public funding, get a better position in the marketplace, or be eligible for student aids. QA processes must develop in such a way that they are embedded in the day to day management of the institution, and essential to support decision making. QA must work with the institutions, with those responsible for the development of programmes, and help them establish larger alliances and partnerships. Then it will be really helping tertiary education to fulfil the role society has given it: to ensure that an ever increasing proportion of the population develop the skills that are essential for national development, which go far beyond those that used to be responsibility of higher education. QA agencies need to understand that there are different things to be done, and that these need to be done well – the point is to learn how different, and what it means to do them well.

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Many recent economic analyses show that the digital revolution and global competition have speeded up technological progress and appreciably reduced the lifecycle of numerous products and technologies. In the world’s leading economies, the close links between creativity, entrepreneurship and innovation are evident. A substantial part of the changes in the recent economic growth of these economies has been the result of the direct contribution of new businesses created by entrepreneurs.

It is becoming more widespread the conviction that entrepreneurs play a crucial role as agents of social and economic change, identifying and making the most of the existing opportunities in the market, opening up or creating new markets and capitalising on these opportunities through the construction of a new business that generates employment. So, by finding new ways of doing things, they stimulate changes that improve the efficiency or productivity of an economy.

Many people have a biased image of what an entrepreneur is. If we asked people for an entrepreneur, the majority would probably speak of the founder of a successful technology company who has built up a huge business empire. In the popular mindset, an entrepreneur is still seen as a visionary, one who risks everything and overcomes great difficulties in the quest for wealth. For some, they become an almost heroic figure, while for others they are a kind of lone and predatory wolf.

The truth, though, is rather different and the appearance of a new business is often the result of a lot of talent, experience and systematic hard work by energetic people.
who invest a lot of time and hopes in transforming an idea or an invention into something that can be commercialised.

We need to ask, then, the determining causes of the entrepreneurial spirit in a society, and in particular the main reasons that drive the decision to create a new business. Insofar as we are all aware that innovation and entrepreneurship are not simply the result of having a brilliant idea but the fruit of complex processes of invention, development and commercialisation of products, we ought to think that talent should become the most determining factor of the entrepreneurial drive of a society.

However, in asking the reasons for the creation of businesses, we get less obvious answers than would appear. Initially, we might think that entrepreneurs are basically motivated by economic need, by the desire to make money, by social recognition or by the independence that comes with setting up your own business. In fact, some authors differentiate entrepreneurs according to their motivations as they feel that creativity and the ability to innovate are different in each case.

A person chooses to set up a business as a consequence of a variety of reasons, and it is right to say that new businesses are usually the reflection of what their founders expected. If the desire for independence outstrips the desire for wealth, we should not be surprised when the financial yield is different. The type of motivation, therefore, is not irrelevant.

If we consider that people decide to set up businesses for very different reasons, it would probably be necessary to understand these reasons in order to understand better the mechanisms determining entrepreneurship. Different studies indicate, however, that the main reason why people start a business has nothing to do with earning a lot of money, being famous or recognised, looking for adventure or improving the world but primarily because, for a variety of reasons, they do not want to carry on working for someone else.

Evidently, this desire for personal independence is associated with what we could consider to be a higher social objective related to improved wellbeing that results from answering new or unsatisfied needs. Many entrepreneurs are driven to act because their aspirations are not satisfied in their present job. This drive will probably be more intense when the potential entrepreneur is aware that their ideas have a far
higher value than the remuneration they get in the company where they work and when the mechanisms for retaining talent in the company do not work properly.

An entrepreneur, therefore, is generally someone who is convinced that they will find a new way of doing something or a new product or service to offer. **Being an entrepreneur, therefore, means being alert to opportunities, wanting to take on risks and having a propensity to change.** All in all, it probably requires energy, optimism, a certain degree of vision and temerity and, evidently, ability.

Entrepreneurial behaviour is probably the result both of personal traits and of the influence of the environment. Both influences necessarily interact, as irrespective of what the entrepreneurial person is like, they will require a setting that affords them access to the appropriate resources. Similarly, many studies show how the availability of resources per se is never sufficient to foster the creation of new businesses.

Generally speaking, it is asserted that the personal factors that affect the probability of developing a business are related to the family background, psychological profile, level of education and previous work experience of the entrepreneur. A great deal of evidence confirms that the propensity to set up a new business is highly related to family background: **most entrepreneurs have a family member (or friend) who is an entrepreneur or self-employed.** The most frequent explanation is that these people act as a role model and, besides being a reference point, can also provide the new entrepreneur with financial support.

Studies also show that both in Europe and in the United States **middle-aged people, with a high level of education and previous work and technical experience are the most active entrepreneurial group,** with the greatest probabilities of success and who set up businesses demanding qualified and well-paid work. It is evident that some of the skills that an entrepreneur requires can also be acquired working for others, especially when they have team management and supervision experience, expertise in consumer analysis and knowledge of the technological and market characteristics of the sector in which they want to set up their business. Significantly, a large proportion of successful entrepreneurs come from small- and medium-sized companies, as in these cases their previous professional experience was broader and less specialised.

As regards the psychological aspects, part of the research into the psychology of the entrepreneur indicates that certain personality traits could lead to a more
entrepreneurial behaviour, although other studies feel that these traits are the result of the influence of other factors on behaviour. From this point of view, **entrepreneurship would not simply be an inherent trait but essentially a skill that can be acquired and developed.** Therefore, personality would naturally play a specific role but it would necessarily be interacting with development, context and opportunity. It appears to be difficult, therefore, to identify a standard entrepreneurial personality type, although studies of technology-based entrepreneurs indicate that this behaviour is more closely associated with a behaviour far removed from speculation and irrational risk-taking. Making the most of talent would, therefore, be accompanied by the willingness to undertake responsibilities when finding solutions to problems, to establish realistic challenges and to adopt calculated risks and in the requirement of a high degree of personal satisfaction.

But does the level of education and talent management impact on a society? The relationship between education and entrepreneurship is apparently more complex than it appears. The high public profile of certain very successful entrepreneurs who did not go to university has given rise to the image that going to university does not make people more entrepreneurial. In fact, one does not need to be a PhD to be a successful entrepreneur but the analyses made in different environments show us that once other socioeconomic variables (such as gender, age, race, previous level of income or business sector) have been taken into account and isolated, **the higher the level of education, the higher the predisposition of the person to set up their own business.**

We might think that if higher education, which is costly in terms of time and money, did not translate into obvious advantages when setting up a new business, it would be difficult to understand how the current boom in specific courses on offer at numerous universities can survive. Sometimes, we might even think that in our society as a whole there are more training opportunities than the number of entrepreneurs!

It is not easy to assess the results and significance of entrepreneurial promotion programmes. All over the world, the range of training programmes that aim to foster the entrepreneurial spirit has grown spectacularly, both in terms of numbers and of heterogeneity. This expansion has been stimulated by the conviction of the role of entrepreneurs as a driving force of economic progress and by a perception that a university education in business science alone does not favour the development of entrepreneurial attitudes in students.
In fact, does increasing the group of students who have theoretical knowledge lead to a greater number of entrepreneurs? Much empirical research shows how the spectacular growth in courses run by universities has not been accompanied by a boom in entrepreneurial activity. On the one hand, entrepreneur support programmes can scarcely be outside the socioeconomic, educational and cultural context of the country where they are promoted and their position in the global economy. On the other, in many cases, a biased focus of these programmes is identified, with a probably excessive emphasis on the starting phase and on rapid-growth, high-yield businesses.

Some research highlights how, in some local environments inclined to the creation of knowledge-intensive businesses, it is the entrepreneurs with a high level of education, committed to ongoing education and with labour experience, who set up the businesses that display a better development in the market and that generate well-paid jobs. In many of these cases, the new business is not born in a university incubator or is the result of ideas that came out of a laboratory. Neither is it the extensive range of training courses that has fostered entrepreneurship but essentially the inability of the company where they work to remunerate their innovative ideas adequately.

However, entrepreneurship depends unfailingly on a context, on a predisposition and on skills. In fact, the need and requirements of quality education appear to be highly evident. Very significantly, research shows us how people who set up a business not only concern themselves with learning the information in the specific entrepreneurship programmes but that they also tend to study on training programmes related to the type of work in which they are setting up their business. The study of the education basis of successful new entrepreneurs shows a wise combination between the general mastery of business skills and the specific knowledge of those aspects that favour the feasibility of their business ideas. Certainly, in our societies, the level of technological complexity is growing and new advances increasingly call for a broader knowledge base and training. It is essential, therefore, that the university system is able to respond to this challenge by developing well-designed educational programmes for entrepreneurs.

Where does the strategic role of universities lie? There is a broad political consensus that training in entrepreneurial skills has to improve the quality and quantity of university-based entrepreneurs in order to improve the basic knowledge and abilities needed to start up a new business and make it viable. This way, most of university
systems have developed a broad and extensive range of support initiatives and have promoted strategic links with the respective local and national industries. Certainly, the entrepreneurial motivation and business skills of new graduates have been improved, yet rates of entrepreneurs are still at modest levels in the world’s main economies insofar as many graduates still prefer the conventional career path with a large multinational or even in the public administration.

However, the pressure on the university system is growing. Added to the classic mission of creating and disseminating knowledge is the need to improve the competitive advantages of the local and regional productive sector by means of a sort of academic capitalism. The well-known model of the triple helix highlights the fundamental role of universities in the system of innovation of an economy supported on knowledge, at the same level as industry and the public administration, in a setting of strategic interaction, reciprocity and co-responsibility. The incubation of new entrepreneurial initiatives, the provision of material resources and the fostering of the skills of these new entrepreneurs becomes a common function of many universities. Today, in different university environments, **incubation is becoming a central and prestigious academic activity** of the emerging paradigm of entrepreneurial universities.

This institutional mission cannot adequately be met without **taking into account the context characterised by the digital revolution and the global economy**. Unfailingly, both university incubators and entrepreneurs will be increasingly part of regional or global networks. Universities have to think strategically and take on board that the resources that we offer our entrepreneurial graduates have to transcend those available in the geographical area of influence and be able to get the most out of the positive and synergic interaction with international stakeholders – including other incubator organisations – in order to obtain gains in economic efficiency, open up the range of opportunities and construct more intangible assets.

In turn, the digital revolution offers us the challenge and opportunity of providing a response to a new innovative student profile: the digital entrepreneur. The economic application of internet technologies breaks down some obstacles to innovation, brings forth new business opportunities and concepts, opens up access to electronic markets, favours internationalisation, improves the availability of new means and resources and facilitates interaction with strategic allies.
The action of many digital entrepreneurs is not only opening up new markets but is also having an appreciable effect on existing markets. Some local and regional markets of traditional services are becoming emerging global digital markets as a result of the disruptive process caused by the arrival of these entrepreneurs. There appears to be a clear future growth potential for these new technology-based businesses.

Digital entrepreneurs require the ability to process adequately the continuous information flows and technological advances that surround them in order to transform this knowledge into the creation of value. Many of them interact strategically using ICT, in the form of virtual networks and teams of entrepreneurs, in order to explore and exploit new business opportunities, search for complementary resources and overcome market obstacles.

This new profile of entrepreneur, who requires highly specialised support, uses up little physical space and seeks opportunities to enter global networks, represents a challenge for university institutions scarcely accustomed to working in virtual environments, also in the field of incubation.

Furthermore, a growing number of graduates are becoming involved in entrepreneurial activities aimed at achieving social objectives. These entrepreneurs, who often have a different perception and valuation of opportunities, become new driving forces of systemic transformation and social change. Their role in meeting social needs is growing in such fields as the environment, health, education and the consequences of poverty.

In achieving their mission, the construction of social capital often becomes a critical factor as the problems they face can rarely be solved independently. The diversity required of stakeholders and knowledge that are necessary for the success and sustainability of these initiatives opens up the opportunity to the university to expand its ability to create social value.

In fact, the education system can not only help in the acquisition and development of people’s entrepreneurial skill but it can also contribute significantly to reducing the obstacles to entrepreneurial initiative from different aspects, as entrepreneurial activities can be restricted by different elements. Besides bureaucratic, administrative and, evidently, financial obstacles, one of the most restrictive elements to entrepreneurship is the presence of an unfavourable institutional
framework, understanding as such the aspects linked to attitudes, values, rules and social habits. In our society, this represents one of the most important barriers to entrepreneurial activity insofar as until very recently the figure of the entrepreneur and the entrepreneurial function has not been sufficiently valued socially.

Creating a general awareness more favourable to entrepreneurial activity means **redefining the attitudes of the members of society and increasing their opportunities to start a business**, this requires continuous effort and the collaboration of the education sector, the financial system and the media, while also involving the introduction of changes to knowledge, attitudes and social behaviour.

In the education field, we should highlight, on the one hand, the increasingly present and widespread programmes in universities that aim to favour the entrepreneurial behaviour and business creation, through the deployment of courses and the organisation of specific activities in the curriculum. It should be hoped that in the European countries this offer grows with the implementation of the European Higher Education Area, whose objectives of improving professional skills and the employment options of the student strengthen the learning of these skills. Within pre-university education, there are also various initiatives to construct a reference framework open to entrepreneurial situations and to arouse curiosity, creativity and the innovative performance among students, such as visits to companies and business creation and administration simulation exercises.

These learning innovations become a fundamental mechanism in favouring a change of attitude towards the figure of the businessperson or entrepreneur, rejecting the more conservative image, accepting business failure and reinforcing it with a legitimate, feasible and positive option. Evidently, these actions for generating talent and disseminating the entrepreneurial culture will have to be reinforced by action in the media as instruments conveying **the predominant cultural values** and also by the public economic promotion agencies and the university business incubators, publicising the best practices and organising events for the social recognition and awarding of prizes to entrepreneurs, which also favours the creation of reference models for potential entrepreneurs.

As has been stated, motivation is one of the other elements extensively studied in the psychological approaches to the entrepreneurial initiative, which is commonly related to the spirit of risk and the search for alternative income. Probably, some of the elements
that play a part in its favour are the desire for independence, for personal realisation and for the practical and autonomous application of one's own ideas; skills that need to be stimulated throughout people's training period. Through the dissemination of reference models of this professional alternative, new aspirations and expectations may emerge, which may in addition contribute to enhancing creative thought.

The dissemination of values, know-how and ways of thinking linked to entrepreneurship very probably help show the legitimacy and attraction of the entrepreneurial option in the professional field, but some critical aspects in the configuration of the entrepreneurial culture, such as avoiding an excessive aversion to risk, a disproportionate punishment for failures and being able to promote creativity, talent and personal initiative are also aspects of the education system that have an impact on students' personality and that have to be well configured long before students enter university, even though it would be necessary for them to be reinforced also through ongoing learning actions throughout people's professional life.

It is often thought that people's lack of business experience and skills becomes the main factor limiting entrepreneurship. As has been commented, in the educational sphere it is also common for many schools and faculties to deploy courses and learning plans that are related to business economics and/or offer professional practical placements that enable students to come into contact with the business world. Besides this, many other institutions contribute to favouring the development of these skills by organising a range of activities, including numerous seminars, conferences or training courses.

With these initiatives, the aim is to inject confidence in the person in relation to their professional skills and their ability to set up a business and to contribute positively to the development of entrepreneurship initiatives. Even though recent studies show how previous professional experience, past experience in setting up businesses and the fact of having worked in the same sector in which the new business is to be created are the most determining factors in entrepreneurial success, many entrepreneurs recognise that these external influences also become a determining core of motivation.

It is revealing that one of the factors that limit the efficiency of these actions to improve the institutional framework that the education system carries out with great effort is the
fact that the tradition of pedagogy and education often still reflects current employment needs and places the emphasis on the contents and acquisition of knowledge rather than on skills and practice, which highlights how inappropriate are the approaches to entrepreneurship that are made from a benevolent and protectionist academicism.

Another of the important challenges facing the university system committed to support and entrepreneurship is being able to construct more hybrid identities from among its faculty and research staff that foster new roles of academic entrepreneurs: those that combine the utmost academic and scientific quality with the attention to entrepreneurial activities and with commercial content.

One of the main drivers of social transformation is nowadays the use of technology. The knowledge embedded in the digital technologies and their use in production, commercialisation, consumption and leisure activities are giving rise to the emergence of new economic, social and educational paradigms. Nowadays, innovations require a broader and more diverse knowledge base such that entrepreneurs face an ever more complex environment, which is why it is important that they are able to take advantage of the different types of knowledge at their disposal and share in those collective learning processes that expand their knowledge base. Therefore, it is outstanding the challenge of a conventional education system whose aim is to promote the entrepreneurial mind among its students. In fact, in this more complex environment, it is probably the successful entrepreneurs who have based their businesses on the strategic use of innovative technologies who have to be the principal agents in the design and implementation of the training programmes that seek to be effective when it comes to helping entrepreneurial people.

If, in the knowledge economy, the person is the most relevant factor because high-qualified and -skilled work is the principal driving agent and disseminator of new knowledge, entrepreneurship therefore becomes one of the essential mechanisms of the creation and transmission of knowledge of a country. Recent studies into entrepreneurial activity show how, insofar as people want to benefit from the yields of their knowledge and become entrepreneurs, a business opportunity emerges and with it a new innovative company. In these start-up cases, the process of innovation will develop on the basis of the knowledge provided by the entrepreneur and the diversity of organisational forms made possible by the application of digital technologies favours this process. It is by no means strange, then, that a great many
recent innovations in products or services in emerging activities are the result of these new businesses.

All over the world, this evolution requires new organisational and work forms. The new competitive businesses show a network configuration and they are self-organising in multidisciplinary work teams of variable geometry, breaking down the traditional barriers of functional areas. Specialisation based on knowledge and direct communications enable the configuration of specific work teams for each project. **This flexibility calls for creative and talented people with a vocation of responsibility and leadership, with self-scheduling and teamwork skills, with a spirit of risk and with a strong involvement in long life learning.** These skills are the ones that should be fostered by the education system of a society that seeks to improve parameters of wellbeing through a more entrepreneurial population.

The lack of a relational culture can also entail a significant obstacle to business creation as social networks based on relationships of mutual trust and respect allow people to come into contact with other agents, detect opportunities, build alliances and foster the transfer of knowledge. At the start of the creation process, it is common for entrepreneurs to use their reference groups as points of access to new social networks. This informal learning process is based on skills that have to be developed throughout people’s education as, in order to ensure the growth and consolidation of the business, over time they will need formalised links that enable them to reach commercial agreements and develop cooperative networks and new forms of social relationships.

A sign of the huge importance that is given to relational culture as a success factor is the fact that many public business support agencies focus their material and financial efforts on favouring these networking actions. However, **we should avoid the temptation of believing that people’s knowledge and abilities are less important than their address book.** Certainly, innovation processes are eminently interactive and collective, such that entrepreneurs do not innovate in isolation. However, in reality, most successful entrepreneurs did not begin with very extensive social networks. It is a question, then, of the **level of qualification, of previous experience, of the ability to absorb and assimilate external knowledge, of being able to take advantage of business opportunities and a wise selection of interactions** rather than the simple proximity of the entrepreneurs to a specific environment or the size of their relational networks.
In our societies, improved economic and social productivity will be based in the future on being able to create new jobs with higher value and on being able to add more value to present jobs. And society as a whole devoting more effort to investing in talent will have to enable ideas worldwide to become tangible realities and others that have already emerged to be able to offer a greater social yield.
A Psychometric Study in the Performance of Distance learners

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About Author
Since 1978 the author has been actively engaged in conducting empirical studies in DE and has specialized in the teaching of Statistics, particularly for distance learners. By 1993 the author, experimenting on all the then prevalent components of educational technology, had demonstrated at various seminars including at IIT Kanpur the comparative learning environment harnessing print, audio, computer (CAL) and Educational film formats for a topic ‘Statistics: An Introduction’.

Abstract
The paper shares the changing cantors in the studies on performance of distance learners and highlights the omission of psychological variables in the process. Based on an empirical study on an array of 12 variables, including psychological variables emerging from the Eysenck Personality Questionnaire, Lyn’s Achievement Motivation Test and Bell’s Adjustment Inventory, the paper discusses the role of various variables, with a special focus on ‘Social Desirability’, ‘Achievement Motivation’, ‘Emotional Adjustment’, ‘Age’ and ‘Previous Academic Score’ in distinguishing between ‘Completers’ and ‘Non-completers’ of the courses. And finally the paper puts forth some suggestions for ensuring a better ‘completion rate’ for distance learners.

Key Words
Performance, Distance-learners, Achievement Motivation, Adjustment, Personality
1. Introduction and review

Much water has flown through the Ganges and the Thames since 1982 when Coldeway lamented that an ‘imprecise definition of boundaries and variables have limited the usefulness of research in distance education’. Now with databases generated at various institutional levels the world over, a number of reviews on distance education literature have been undertaken in which even the categorization schemes on research areas have been developed (Sujatha, 1988). Of late, the educationists, in general, too have realized that the scope of research in distance education is quite broad. It ranges from ‘learning’ to ‘teaching’ application, it addresses ‘financial issues’ and ‘issues of access’, it deals with the strategic use of technology, and so on. In this regard, the performance of students in distance education has also engaged some researchers. While most of the studies in the last century focused on comparing the performance of ‘on campus’ and ‘off campus’ students, in the current scenario the focus is also being laid on the performance with respect to the ICT factor. For instance, Tesarowski (1982) on the bases of three studies had concluded that the ‘independent study students achieve at least as well as on campus students’. Identical results were reported by Javons (1982), Olmsted (2000), and Kotey and Anderson (2006).

In the Indian context some divergent views have been expressed by the researchers. For instance, Shashi (1972) and Panda (1980) did not find any statistically significant difference between the achievements of under-graduate students of correspondence and their counterparts in the regular system in the Delhi University and Utkal University respectively. Anand (1979) observed that the pass percentage of ‘correspondence students’ in the Panjab University was lower than that at the university level. While Biswal (1979) found that the ‘students in the two streams do differ in performance but to an insignificant extent’, Pandey (1980) observed that ‘at an overall course levels, in Meerut, Delhi, Panjab, Punjabi, Bombay, SV and MK universities, the pass percentages of correspondence streams were higher than those of students in the regular streams’. In this regard, Sharma and Yadav (1987) have observed that while ‘the quantitative output of correspondence education in different Indian universities differ significantly where the total average output of all the universities may be stated as satisfactory’, ‘the quality of academic performance of correspondence students differ significantly and may be termed as very poor’. In a study on examination results for language courses in ‘distance education’ and ‘regular set-up’ in the Panjab University, Mahajan (1991) has put forth some interesting observations. The study has revealed that though in the 1980s’ students enrolled in the correspondence courses invariably secured top positions in the university examinations, but in the overall analysis there were vast disparities in pass percentages of students, unfavorable to the students of ‘correspondence education’ in comparison to their counterparts in the ‘regular set-up’. The study also suggested that the female students have exhibited better pass percentage than their male counterparts in correspondence education.

In the recent context, the researchers have also shown their keenness in studying the performance of students in the light of applications and developments in Information and Communication Technologies (ICT). For instance, while Syed (2001) focused on the “impact of television on students ‘performance in assignments and final examination”, Dutton and Dutton (2005) have suggested that ‘students in the online section had higher academic performance, even when we controlled for other important variables’. Carbonaro (2006) has looked into the “factors that may influence online learning for distance education nursing students at a Canadian community college”

2. Need of the Study

A close scrutiny of the results and the scope of the studies suggest that the literature on the performance of students in distance education is virtually devoid of focus on the mental make-up of distance learners. A person’s behavior and success is guided by many physiological and psychological factors. Biological urges, psychological needs and socio-cultural drives stimulate
behavior. And hence this attempt has been made with the help of the following revered psychological tools:

- Eysenck Personality Questionnaire
- Lyn’s Achievement Motivation Test, and
- Bell’s Adjustment Inventory.

The variables thus emerging from the psychological tools have been found to have bearings on academic achievements (Mohan and Gulati, 1986).

Besides scaling distance learners, the term henceforth used to refer to the students enrolled in distance education, on Personality (measured in terms of Social Desirability, Extroversion/Introversion, Neuroticism, Psychoticism), Achievement Motivation, Adjustments (measured in terms of Home Adjustment, Social Adjustment, Emotional Adjustment, Emotional Adjustment), for the study, information was also gathered on distance learners’ age, gender and previous academic score (i.e., Score in the Graduation). It may be noted that Bell’s Adjustment Inventory, in fact, refers to ‘mal-adjustments’, in the sense that higher score on any of the factors, i.e., Home Adjustment, Social Adjustment, Emotional Adjustment, Emotional Adjustment, in turn, suggests mal-adjustment on that count.

3. Data and Results

For the study, the data was collected from 444 distance learners (DL) pursuing Post Graduate courses in the University School of Open Learning (formerly Department of Correspondence Courses in the Panjab University, Chandigarh).

Following table (no.1) gives information on the Number of DL (N), and arithmetic mean (AM), standard deviation (sd) and t-values on 12 variables pertaining to ‘Completers’ and ‘Non-completers’ of the courses. The term ‘Completers’ referred to those DL who were declared pass in the annual examination at the first instance and ‘Non-completers’ comprised the group who, at the first instance, could not complete the course by virtue of being declared ‘fail’, ‘absent’ or ‘compartment/reappear case’, or the like. Standard statistical testing procedure, by taking Null Hypothesis of ‘no-difference on the average score’ between ‘groups’, was used in different cases.

Table No.1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Status</th>
<th>Non-completers (N=256)</th>
<th>Completers (N=188)</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM</td>
<td>sd</td>
<td>AM</td>
<td>sd</td>
</tr>
<tr>
<td>Age</td>
<td>23.2773</td>
<td>4.7093</td>
<td>23.8404</td>
<td>5.1725</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>11.6719</td>
<td>3.0553</td>
<td>12.1968</td>
<td>3.1570</td>
</tr>
<tr>
<td>Extroversion/Introversion</td>
<td>12.7109</td>
<td>2.9081</td>
<td>12.6596</td>
<td>3.2574</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>9.0039</td>
<td>4.2634</td>
<td>8.4309</td>
<td>4.0756</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>3.5078</td>
<td>1.9980</td>
<td>3.3191</td>
<td>2.2972</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>5.6289</td>
<td>1.1406</td>
<td>6.0372</td>
<td>1.0046</td>
</tr>
<tr>
<td>Home Adjustment</td>
<td>7.6992</td>
<td>4.6811</td>
<td>7.5745</td>
<td>4.6111</td>
</tr>
<tr>
<td>Health Adjustment</td>
<td>6.9531</td>
<td>3.8407</td>
<td>6.8777</td>
<td>3.8266</td>
</tr>
<tr>
<td>Social Adjustment</td>
<td>12.1367</td>
<td>5.0783</td>
<td>11.9894</td>
<td>5.1179</td>
</tr>
<tr>
<td>Emotional Adjustment</td>
<td>10.9102</td>
<td>5.9636</td>
<td>9.9362</td>
<td>5.2617</td>
</tr>
<tr>
<td>Score in 10+2</td>
<td>55.7266</td>
<td>8.3368</td>
<td>56.9415</td>
<td>8.0175</td>
</tr>
<tr>
<td>Score in Graduation</td>
<td>51.8984</td>
<td>5.4476</td>
<td>54.3085</td>
<td>7.9773</td>
</tr>
</tbody>
</table>

*indicates significant at 5% level of significance
***indicates significant at 10% level of significance

Following table (No.2) gives sex-wise information on the Number of DL (N), and arithmetic mean (AM), standard deviation (sd) and t-values on 12 variables pertaining to ‘Completers’ and ‘Non-completers’ of the courses.
Table No.2

<table>
<thead>
<tr>
<th>Variables</th>
<th>Status</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Non-completers N= 110 AM (sd)</td>
<td>Completers N= 108 AM (sd)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>21.7000 (2.3986)</td>
<td>22.3889 (4.2069)</td>
</tr>
<tr>
<td>Social Desirability</td>
<td></td>
<td>11.4727 (3.3639)</td>
<td>12.0926 (2.4057)</td>
</tr>
<tr>
<td>Extroversion/Introversion</td>
<td></td>
<td>12.3364 (3.0689)</td>
<td>12.4352 (1601)</td>
</tr>
<tr>
<td>Neuroticism</td>
<td></td>
<td>9.3636 (4.5870)</td>
<td>8.7500 (4.3215)</td>
</tr>
<tr>
<td>Psychoticism</td>
<td></td>
<td>3.2273 (1.9614)</td>
<td>2.9907 (2.0393)</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td></td>
<td>5.7727 (1.0976)</td>
<td>6.0463 (0.9311)</td>
</tr>
<tr>
<td>Home Adjustment</td>
<td></td>
<td>7.1818 (4.2989)</td>
<td>7.7130 (4.6785)</td>
</tr>
<tr>
<td>Health Adjustment</td>
<td></td>
<td>12.1273 (5.4202)</td>
<td>12.1944 (4.9246)</td>
</tr>
<tr>
<td>Social Adjustment</td>
<td></td>
<td>13.1273 (5.4202)</td>
<td>12.1944 (4.9246)</td>
</tr>
<tr>
<td>Emotional Adjustment</td>
<td></td>
<td>11.9818 (6.4324)</td>
<td>11.0741 (5.3820)</td>
</tr>
<tr>
<td>Score in 10+2</td>
<td></td>
<td>57.0638 (8.4205)</td>
<td>57.6574 (8.1426)</td>
</tr>
<tr>
<td>Score in Graduation</td>
<td></td>
<td>53.000 (5.7597)</td>
<td>54.8241 (6.4313)</td>
</tr>
</tbody>
</table>

*indicates significant at 5% level of significance
***indicates significant at 10% level of significance

4. Discussion
In the analysis on the total population of DL, ‘Social Desirability’, ‘Achievement Motivation’, ‘Emotional Adjustment’ and ‘Score in Graduation’ have emerged as the variables which significantly distinguished between ‘Completers’ and ‘Non-completers’.

In the sex-wise comparison, while for the female learners, ‘Achievement Motivation’ and ‘Score in Graduation’ have emerged as the key variables distinguishing between ‘Non-completers’ and ‘Completers’, for the male learners, ‘Age’, ‘Achievement Motivation’, ‘Emotional Adjustment’ and ‘Score in Graduation’ emerged as the key distinguishing variables.

Thus a review on the results suggests that the ‘Achievement Motivation’ and the ‘Score in Graduation’ could safely be betted as the key variables distinguishing between ‘Non-completers’ and ‘Completers’ in distance education system. In other words, the higher ‘Achievement Motivation’ or the better ‘previous academic score’ have been quite important inputs in distinguishing between ‘Non-completers’ and ‘Completers’ and these can be argued on quite trivial grounds.

Notably, in the context of over all population, mild evidences of variation on ‘Social Desirability’ and ‘Emotional Adjustment’ have also been observed between ‘Non-completers’ and ‘Completers’. While the ‘Emotional Adjustment’ has emerged as another notable variable.
distinguishing between ‘Non-completers’ and ‘Completers’ in the male population, the impact of ‘Social Desirability’ might have lost its significance due to the ‘aggregation’ (wherein two subgroups negate the impact of each other when studied as a group) - a phenomenon not uncommon in the statistical analysis.

The ‘age’ factor seems to have played an important role amongst distance learners. The ‘Completers’ have been found to have higher ‘age’ than the ‘Non-completers’, be it the case of over all population, or, female or male populations taken separately, though statistically ‘age’ has been found to be significantly higher for the male ‘Completers’ in comparison to the male ‘Non-completers’. This has not been so for the female segment.

The result on ‘age’, when viewed in the light of ‘number of completers’, makes an interesting comparison. Amongst the female learners the pass percentage stood at 47 and the ‘age’ has not been a significant variable, as against the male learners whose pass percentage was 35 and ‘age’ has emerged as significant variable in distinguishing between ‘Non-completers’ and ‘Completers’. So the suggestion usually put forth in developing strategies pertaining to andragogy, that ‘age’, which purports to provide ‘maturity’, can propel success needs to be emphatically qualified.

However, ‘age’ when taken together with ‘emotional adjustment’ may be argued, surely, for the ‘male completers’. Female ‘completers’ have indeed shown higher average score on ‘age’ and ‘mal-emotional adjustment’, but these have not been statistically significant, as has been found in the case of ‘male learners’. The result, of course, supports the assertion by Mohan (1990, 1992) that ‘with age, adjustments improve’.

The variable, ‘emotional adjustment’, derives still more attention in view of the ‘unique characteristic of distance education’ (Keegan, 1980), or as Price (1985) puts that studying within the real world is a particular advantage but it can of course be problematic as students at conventional institutes are primarily the students, etc., but their main identity is that of students whereas for a student in distance, he may be mother/father, worker, house keeper, etc., student is only one aspect of their lives. It may not always easy to fit together study and family, work and living in a wider community.

Amidst personality traits, though no variable, except ‘Social Desirability’, has shown statistical significant variation between ‘Non-completers’ and ‘Completers’, but these variables can not be out-rightly overlooked from discussion.

The ‘Social Desirability is also considered as a tendency to respond in a socially desirable way and a high score on Social Desirability shows tendency to protect self-esteem or ego defence mechanism (Malhotra, 1981).’ In the study, the ‘Completers’ have been found to have a higher average score on ‘Social Desirability’ than the ‘Non-completers’, both for female or male populations taken separately, though not to the extent of statistically significant. However, mild evidence of difference has been found to suggest that ‘Completers’ have a higher average score on ‘Social Desirability’ than the ‘Non-completers’.

As regards Neuroticism, in the study, be it in the context of over all population, or, female or male populations taken separately, the ‘Non-completers’ have been found to have higher average score on Neuroticism, in comparison to the ‘Completers’, though not statistically significant. It may be noted that Neuroticism, by which Eysenck implies drive, complements Extroversion/Introversion in explaining behavioral patterns, a high scoring individual on Neuroticism tend to be emotionally over-responsive and to have difficulties in returning a normal state after emotional experience.

On Psychoticism, Eysenck and Eysenck (1978) have stated that a high scorer on Psychoticism may be described as solitary not caring for the people. While the variable has not been found to be significantly varying between ‘Completers’ and ‘Non-completers’, it has been found to have
higher average score amongst ‘Non-completers’ than the ‘Completers’ in the overall population and amongst the female learners.

5. Conclusions
Notwithstanding the limitation of the study on account of its limited scope, it provides some inputs on the impact of some psychological variables, such as ‘Social Desirability’, ‘Achievement Motivation’ and ‘Emotional Adjustment’ in distinguishing between ‘Completers’ and ‘Non-completers’ in distance education. While ‘age’ and ‘previous academic score’ do make a difference in the success of distance learners, a careful counseling of distance learners on emotional and behavioral aspects is deemed to make some difference in improving their chances of successfully completion of their course. Nonetheless, the study calls for more longitudinal and multivariate studies in this regard for having a better understanding of the mental make-up of distance learners.

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MANAGING QUALITY ASSURANCE FOR DISTANCE LEARNING PROGRAMS IN MALAYSIA

Mohd Ismail Ramli, Malaysia

Summary

This paper articulates the quality assurance efforts taken by one of the leading distance learning institutions in Malaysia. Quality is an underpinning pre-requisite in offering distance learning programs in Malaysia. A low quality distance learning program will never maintain its sustainability in a local educational industry. To fulfill the pre-requisite, MARA University of Technology as one of the leading distance learning institutions in Malaysia has adopted effective measures in assuring quality in its distance learning programs in many important aspects such as learning facilitators, course content, physical and IT infrastructure, teaching, learning experience, assessment and evaluation, learning materials and learners support. This paper also discusses the issues and challenges in assuring quality in the distance learning programs.

Introduction

Malaysia is one of the rapid growing countries in the world which education is one of its major focuses in developing quality human capital. For example, in 2008 the government had allocated 42 billion Malaysian Ringgit (Hero Ventures Sdn. Bhd, 2009). Such amount really reflects the government efforts in developing quality human capital as one of the measures in achieving industrialized country in the year 2020. Distance education is one of important modes of learning which is significantly plays an important role in providing learning opportunities to those who cannot quit their job but highly motivated to further their education.

UiTM (MARA University of Technology) as the largest university in Malaysia has been offering distance education programs for more than a decade to the Bumiputera students (indigenous group) in order to produce more professional Bumiputeras. Being one of the best universities in the country, the aspect of quality always becomes priority before offering any programs to the Bumiputera students. This to guarantee the programs offered are recognized by the government, Malaysian Qualification Agency, Employers, and meeting the customers’ expectation. What more with the presence of many competitors such as Malaysian Open University, Wawasan Open University and many other foreign universities which are offering distance programs. To ensure the quality of the distance education programs Distance Education Centre has taken numerous actions in many aspects of it operations which based on UiTM (Universiti Teknologi MARA) Balancing Q-Q 5Es Model as shown in Exhibit 1. The model has been used as a basis for the strategic plan of the university (2006 to 2010) in delivering quality graduates for the human capital of the nation.
UiTM Balancing Q-Q 5E’s Model

Exhibit 1: UiTM Balancing Q-Q 5E’s Model

The Model promotes four (4) main principles that balanced one another. The first Q represents quantity, whereas the second Q represents quality and being pivoted in the centre reflecting the balancing effect between the two Qs. This balancing effect is supported by three principles, i.e., substance over form, prudence/conservatism and value for money. Within these principles are the 5Es-Esprit de Corps, Economic, Efficiency, Effectiveness and Ethic. The fourth principle is Measure What Matters to signify the importance of performance measurement in guiding the university charting its transformation roadmap.

Managing Quality Assurance

In promoting the quality of distance learners (substance), the Distance Education Centre practices an equal opportunity among the haves and the haves not when it comes to student’s intake. A wide selection of programs is offered to cater as many potential students as possible. As of now 24 programs are offered that ranging from diploma level to masters degree. However, a well tested procedure is referred to ensure quality students are enrolled in field matching their capabilities. New applicants have to meet the minimum entry requirements as the fulltime students. However those who have not met the minimum requirements could compensate it with related working experience which subjected to selection committees’ approval. The selection process is carried out ethically by adhering to predetermined policies and procedures.
Meanwhile the Distance Education Centre is also taking steps in assuring quality by promoting the ISO 9001:2000 guideline in its management systems and making sure its entire programs are accredited under the Malaysian Qualification Agency, a national body responsible for quality assurance in tertiary education.

Meanwhile, in maintaining the balance between the quantity and quality, there is a factor of cost that comes into play. Since UiTM is governed under the Ministry of Higher Education, the budget to run the university and to support the development project all comes from the public fund. The third principle is promoted to ensure the amount of budget allocated is well spent in the sense that it takes into account the concept of Value for Money (economy, efficient, effective). All the relevant parties are equipped with appropriate policy and guiding rules & procedures in ensuring a good procurement practice.

Good delivery systems that support teaching and learning is maintained in every aspects such as curriculum development, support services, facilitators, learning centers, online class, course registration, continuous assessment and examination, IT infrastructure, Monitoring of the Online Interaction and seminar and handling students’ complaint.

**Curriculum Development**
The curriculums are designed by panel of experts in one particular discipline such as subject matter experts, practitioners, representative from industries, and regulatory bodies. This is to ensure the curriculums fulfill the need of the industries, learners, government, regulators and other stakeholders. As a result many of the programs receive wide recognition at national and international level.

**Support Services,**
The UiTM distance education team constantly upgrades support services. It includes Online Counseling, communication via Fax, telephone and e-mail and administrative support. Counseling is important for distance learners, as they are always not on campus. Therefore they need administrative and academic support that they can rely and call in times of need. Overall, there are 15 Program Coordinators in Shah Alam, one Program Coordinator in each learning center. Program Coordinators are responsible in advising learners in academic matters, preparing schedules, and determining the learning facilitators and resource persons for each on-line subject. In addition to that, Distance Education Centre also appointed a coordinator specifically to handle all matters regarding student affairs such as organizing motivational courses and talks for adult learners, sports and study skills workshops.

**Competent Facilitators (Seminar Facilitators and Learning Facilitator),**
The quality of facilitators has always been enhanced from time to time by providing relevant training programs. Latest ideas and technology is very important in helping the Learning facilitator (LF) to interacts, assist and guide the learners in reading SIM (Self Instructional Material) and web-based materials on the web. They will initiate discussion among learners, and answer questions related to the subject. They will assist learners in providing learning skills such as how to answer questions and how to do assignments and projects. All online facilitators are required to log in to the web everyday to answer questions from learners.

Similarly to Seminar Facilitators (SF) who conducts the face-to-face seminar. They are also trained to conduct effective seminar (face to face meeting) that responsible to distribute, collect and grade assignments or projects provided by SFs. They are also responsible to conduct, collect and grade tests and exams and also provide and solicit feedback to /from RPs, LFs, SIM writers and managers.

**Learning Center**
In creating high accessibility to education, face to face meeting are conducted at 9 UiTM campuses which located in almost every state in Malaysia. These study centers provide
support services to the learners. Learner need not travel to the main campus (Shah Alam, Selangor) for face-to-face seminars or for registration purpose or for counseling. They can go to the nearest study center, which is convenient to their workplace. However not all the study centers offer all programs. There are some programs which are only being offered in Shah Alam. The students from other states still have to travel to Shah Alam.

**Online discussion and Forum,**
The web is used for communication and interaction purposes. The electronic class consists of Chat, e-mail and forum. Learners are able to discuss and interact using these technologies.

The proper utilization of the web as a communication tool alleviates the need for face-to-face meetings in the confines of a traditional classroom. This medium can be used “as a classroom in virtual space and unbounded by time or geographical location.” With a little imagination and innovation, a teacher can transform the web “classroom” into a lively and intellectually stimulating environment conducive for learning.

**Online Course Registration**
A reliable online course registration is constructed to help the students who are scattered everywhere in Malaysia to register every semester. They are also allowed to drop and add within a given period of time and they also can validate the registration to avoid any mistake.

**Continuous Assessment and Final Examination**
The assessment and examination are strictly based on the faculty requirements in ensuring quality. However, the facilitators may conduct the continuous assessments according to their suitability. Most facilitators conduct the continuous assessment live in seminar rooms. Since the programs belong to the faculty, the students have to take the same exam as the on-campus students do to ensure the quality. The final exam is held at the end of every semester.

**The IT Infrastructure**
An effective Learning Management System (LMS) which was developed by UiTM is able to serve as a reliable platform where the facilitators can communicate with their students by using any of the following interactions channels:

- **FORUM (Asynchronous)** for one-to-many or for many-to-many discussions. This type of channel has the potential to develop a student’s thinking as well as promote writing skills. The FORUM can be used at three levels:
  - Public Level, where ALL users are able to view and participate.
  - Group level, where access can be determined by lecturers.
  - Course level, for ALL users enrolled in a certain course/subject.
- **E-MAIL**, for one-to-one interaction
- **CHAT (Synchronous)**, for one-to-many or for many-to-many, but reduces flexibility in terms of time.

**Monitoring of the Online Interaction and seminar**
The online interaction is always being monitored by the program coordinators by checking the statistics of participation or interaction provided by the LMS. A program coordinator is able to identify the duration of interaction of a learning facilitator on the web. Reminders are always being given to those who fail to interact according to the standard requirement which is within 48 hours.

The students’ feedback which is obtained from seminar facilitators evaluation and online interaction is always being used as an effective mechanism to ensure the quality of teaching of the seminar facilitators. Advises and reminders are always being given to the problematic seminar facilitators.
Handling Students’ Complaint
One of the characteristics of adult learners is they come back to school with very high expectation. They aspect everything is taught by the lecturers. Thus, anything they feel not up to their expectation will be voice out in the group or public forum. These forums have become the official channels for the students to complaint and for the management to receive feedback from the students besides suggestion box, email and letters.

And finally the road map of the Distance Education Centre in managing quality of distance programs is well guarded by a performance management systems that pinpoint only the relevant key performance indicators and is tracked twice yearly according to the regular cycle of a semester system. The achievement of the identified key performance indicators are reported to be viewed by management, for them to take relevant action in ensuring the quality graduates will materialised. The performance management of the university takes the systemic approach that it encompasses the whole system from input, process and output.

Issues and Challenges

There are several issues and challenges have emerged in managing quality as follows:

1. Cooperation of academic and administrative staff
   Not everyone understands and supports the idea of quality assurance. These happened could be due to lack of understanding about the quality assurance or refuse to accept new ideas.

2. Changing technology
   As technology changes, Distance Education Centre needs to review its technological status. Upgrading of technology has to be continuous in order to be at the leading edge all the time.

3. Competition with other providers of education
   UiTM has to face with stiffer competition as all the eleven (11) public universities have collaborated to form an open university claiming to offer programs in the same mode as that of UiTM at almost half the price. There are also a number of private universities working towards offering on-line education.

4. Students’ expectation
   Adult students come back to school with high expectation. They expect everything is in place perfectly. For example, the students expect everything is to be taught by the seminar facilitators as the fulltime students. This happened due to the misunderstanding of the concept of e-learning program. As a result, they always lodge many complaints on many issues which sometimes are inappropriate.

Conclusion

As one of the leading institution in e-learning program in the country, Distance Education Centre has done a great effort in promoting quality in distance learning programs. A well planned approach which is based on empirical evidences was an essential factor in warranting this success. Today more than 50% students graduated with more than 2.75 CGPA which is at par with the fulltime students. In preparing as a quality agent, an e-learning manager has to equip him or herself with conceptual skill, technical skill and human skill that can help them to promote quality e-learning program that can fulfill the students’ needs as well as the society. Understanding the concept of adult learning is another
important factor in managing quality of e-learning program. An e-learning manager has to treat the adult students professionally. They cannot be treated like school children or adolescence. Flexibility has always been one of the important aspects when dealing with them. As a result they will be motivated to learn and sustain in their studies.

REFERENCES


I. Introduction

The theme of this conference indicates the need for educational systems to provide quality education particularly for those referred to as ‘unconventional students’ in a context in which the global economic and financial crisis has meant that workers may be required to extend their years of employment in order to survive with some degree of comfort in later years. The adverse economic situation has also been viewed as providing an opportunity for educational systems and universities in particular to find innovative and creative ways of “making accessible and mobilising knowledge for society, and expanding the boundaries of our knowledge”.

The current climate is also viewed as providing universities with the opportunity for making strategic changes that will augur well for the future well-being of society through the provision of quality education which is needed for economic sustainability.

Globalisation and trade liberalisation have led in recent times to an increase in the number of students enrolled in higher education, primarily through the proliferation of universities in many regions of the world, particularly in the Caribbean, Latin America, Africa, and in several Arab countries and in Europe. While this trend has increased access to higher education for many, it has also led to a high level of competitiveness and, in the Caribbean, the area with which I am most familiar, it has also led to issues related to the quality of programmes offered by some of these institutions. McIntosh (2004:5) refers to challenges that have emerged with globalization, including the erosion of the traditional role of governments in “regulatory mechanisms and recognition of qualifications for certification.” He cites Van der Wende (1998) who wrote: “Often national governments are not in a position to steer initiatives, nor can they always monitor the quality of a particular programme or the trustworthiness of certain non-accredited providers.” He goes on to quote Van der Wende as saying, “This leads to uncertainty by students and, in a later stage, their employers...about the value of degrees and certificates” (p.5).

In developing countries like those in Latin America and the Caribbean in which economic development is dependent upon the employability of the populace and their acquisition of skills and competences that are

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needed in the workplace, the issue of quality education is an important one and the traditional public universities which have tended to allow entry on the basis of specific matriculation requirements for higher degrees are now challenged to find innovative ways to attract students and to augment the traditional Faculty-driven offerings with more demand-driven programmes in the face of changing needs of learners and the job market. McIntosh (2005:3) makes another point that “With the explosion of knowledge and the breaking down of the old fixed patterns of employment, learners are increasingly demanding a type of education that allows them to update their knowledge whenever necessary and to go on doing so throughout their working lives.” He says “It is less and less realistic to imagine that one can take a degree as a badge of employability, go into a career and never return to education.”

Changing patterns in the workplace, which may be exacerbated by the current economic situation, exert pressure upon individuals to maximise opportunities for employment. This brings into sharp focus – once again – the importance of lifelong learning as a means of enabling workers to cope with rapidly changing demands and to survive in the labour market. The concept of lifelong learning has become more critical as a factor which influences the employability of individuals. This paper will briefly explore interpretations for both terms and discuss trends reported in the findings of studies on the subject. The use of e-learning for promoting lifelong learning and employability will be explored and some comments on the role that universities can play in fostering lifelong learning and employability will be made.

II. Lifelong learning and employability: definitions and trends
Since the publication of the Faure Report Learning to Be in 1972, lifelong education or the alternative more frequently used term lifelong learning has been promoted as a critical concept in the formulation of education policies and has influenced the direction of educational development in many countries. Lifelong education was viewed as the means by which societies could be transformed through the development of human resources. Harris identifies three characteristics that represent the changing focus of lifelong learning since the 1970’s. The first relates to “rationale” which he says permeated discourse on lifelong learning during the 70s. The focus in that period was on “social capital” and the idea of “individual development” for “citizenship and the good of society” was considered to be of primary importance (p.2).

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The second characteristic relates to what he calls “focus” and which involved a “pre-occupation with formal education contexts.” According to Dave (1973) whom he cites, lifelong learning was considered to be “a corrective measure for the existing system of education” which provided “direction for the development and total system of education”. The third characteristic relates to the point to which I referred earlier, namely, the use of the terminology used to refer to the concept and the alternation between lifelong education and lifelong learning, with the former also occurring synonymously with terms such as ‘recurrant education’, and ‘permanent education‘ (p.2). The terms continuing education and adult education are also used synonymously with lifelong education but at a glance the term permanent education will be seen to bear connotations of a restrictive nature that do not normally apply to a broad understanding of the concept. During the 1990s, the discourse on lifelong learning focused primarily on the economic more than the social aspects of learning and Harris cites a 1995 report by himself and others in which they had commented that “Economic factors are increasingly becoming the rationale for educational policy decisions and the means of measuring their success” (p.3). The discussion focused on the context of learning, for example, calling for technical and vocational training at secondary levels, incorporation of cooperative education in universities, and “integrated training” in institutes of further education. According to Harris, in that period learning was seen “as continuous, embedded in work and other experiences and as including both formal and informal learning” (p.3). The third characteristic which referred to the use of terminology seems to focus on the preferred term for reference and Harris reports that lifelong learning gained precedence over lifelong education because of “realisation that learning is the key attribute and that it occurs in a much wider theatre than simply the educational domain of life” (p.3). While Lifelong learning is commonly used in the literature, others point out that lifelong education is also used, particularly in policy documents and some consider it to be preferred because “it implies a more explicitly intentional learning than the casual, unintended learning implied by lifelong learning” (Educational Encyclopaedia).

The merits of using one or other term can be weighed in the context and purpose of the particular discourse. In the context for which this paper is being presented, the former term has been adopted but the other is used in other instances where it is more appropriate; one finds several definitions for lifelong learning in the literature. One that is commonly cited is Smith and Spurling’s (1999) reference to it as associated with consistent learning by people throughout their lifespan and covering all of life from the “cradle to the grave.”4 In that conceptualisation learning can begin at any age. Longworth and Davies (1996) defined lifelong learning as “the development of human potential through a continually supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and

4 See information in Note #3.
understanding they will require throughout their lifetimes and to apply them with confidence, creativity and enjoyment in all roles, circumstances and environments” (p.22). Gvaramadze (2007:1)\(^5\) refers to the definition given by the European Commission’s (2000) Memorandum on Lifelong Learning as “An essential policy for the development of citizenship, social cohesion and employment.” Common to these definitions are the following essential points that are of relevance to the discussion in this paper. (1) That learning can take place throughout one’s life and that an individual can continue to develop skills, competences and refine behaviours as a result of that learning. (2) That educational systems can play an important role in the learning and development of individuals and influence their response and actions throughout life. (3) That as a result of learning, individuals can adapt to changing circumstances and contexts in such a way that they can be productive in and derive satisfaction from the different circumstances and situations in which they find themselves.

The second concept of interest, namely that of employability is strongly implied in all the points listed in the foregoing paragraph. As with the term lifelong learning, several definitions are presented in the literature for employability. I consider a few. The easily available Wikipedia – the free encyclopaedia cites a definition of employability given by Hillage and Pollard (998) as “a person’s capability of gaining initial employment, maintaining employment, and obtaining new employment if required.” A special issue of LLinE: Lifelong Learning in Europe\(^6\) summarises definitions of employability culled from several sources in this way: “The employees’ ability to survive on the labour market in spite of the turbulence” (p.1). The article goes on to note that “Full participation in society requires a fair amount of intellectual, social-emotional and technological competences that are susceptible for obsolescence” and that the citizen competences are “the absolute minimum for getting a job, even at a relatively low level” (p.1).

Strivens and Grant (2000) refer to the more specific use of the term “employability skills in a 1998 publication by Coopers & Lybrand which present employability skills as including “traditional intellectual skills (e.g. analysis, critical evaluation, logical argument, reasoning from evidence); ‘the new core or key skills (communication, application of number, information technology, teamwork, learning how to learn; personal attributes deemed to have market value (e.g. self-reliance, adaptability, drive) and a knowledge of organisations and how they work” (p.41). Strivens and Grant point out that people from all walks of life need to develop their employability skills and the needs of learners both inside and

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\(^5\) Gvaramadze, Irakli – AEGEE (July 2007) Lifelong Learning (LLL): “It is never too soon or too late for learning” Education Working Group Expert on Lifelong Learning (LLL).

outside institutions need to be addressed. They suggest that this support to learners is “best provided by an information and communication technology (ICT) framework which is coherent and accessible” (p.41). Yorke (2004:9) defines employability as “a set of achievements - skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy.” This is the ‘working definition’ used by the ESECT group and the authors writing for Learning and Employability Series published by ESECT are concerned with higher education and work opportunities for graduates and postgraduates. The role of universities in promoting lifelong learning will be considered in the following section within the context of discussing the university system as agent for innovation, and for economic and social progress which is a focussed theme of this conference. In countries in which university education is available still to only a relatively small percentage of the population, governments have sought to find alternative ways of providing opportunities for learning and lifelong learning.

A search for world trends in lifelong learning and employability yielded a comprehensive document by the Organisation for Economic Cooperation and Development (OECD) on the situation in the OECD member countries. The publication Education at a Glance :OECD Indicators presents statistics and research on “economic social and environmental issues” (p.2) as well as the analysis on performance on several key indicators of which this paper will present a summary of selected findings of Indicator A6: How does participation in education affect participation in the labour market. The information provided on this presents several implications for lifelong learning and employability. A few critical findings will be presented subsequently in this section. It is worth noting that a similar search for information on countries outside the OECD did not yield comparable information. The International Labour Office Report (2008) commented on the difficulty of getting information, noting the difficulty of “reviewing the relationships between trends in education, productivity and employment for even a handful of countries in this group” (because of) the lack of up to date comparable data” (p.36). The report compared productivity levels by country groups for the years 1996 and 2006 and indicated that productivity levels in OECD countries were significantly higher than in developing countries in both years and in 2006 “productivity in high-income OECD countries was four times higher than productivity in developing countries and nearly 18 times higher than in Least developed countries” (LDCs) (p.16).

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7 OECD member countries are: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

8 Those referred to in the report as the developing countries
Using literacy which was the education indicator which was the most widely available across countries and reported “as the share of the population above the age of 15 years able to read and write” (p.17), the finding was that “literacy is nearly universal in the OECD and CEE (the countries of Central Europe).” However, in the LDCs “only half of the population is literate, and literacy rates are even lower for women: nearly six out of ten women over the age of 15 years cannot read and write” (p.17). One notes the difference between employment and employability, the latter being concerned with an individual’s readiness for employment, having the skills and competences needed to do the job and being able “to survive on the labour market” (LLinE, 2005:1). It is important to keep that distinction in mind in the discussion. The following summary points represent some of the main findings presented in the report which have direct implications for education, lifelong learning and employability.

- “Across all countries, women are over-represented in jobs and tasks that require fewer and lower value skills, are lower paid and offer restricted career prospects. In the informal economy, which implies greater job insecurity, as well as lack of access to training, social protection and other resources, making them comparatively more vulnerable to poverty and marginalization” (p.6).

The report noted that a difference in the types of training for men and women resulted in a “skills gap”. It observed that “more often than not training of girls and young women is limited to traditional occupation areas rather than being geared to new demands in the labour market”, and it proposed that “Overcoming barriers that deter women from training – at and outside the workplace – serves the twin objectives of reducing inequality and meeting labour market needs” (p.40).

- In developing countries in Asia and the Pacific, Latin America, the Arab States and Africa, two main challenges are “meeting the demand for higher skills in the growing higher-technology, often export-oriented sectors, … and using skills development to improve productivity and support formalization of economic activities in the still largely impoverished informal economy” (p.35).

- “In Latin America there is a general concern that while coverage of education and training has increased, the quality of that education has not adequately equipped young people for the labour market. This has led to calls to increase the vocational content of secondary education” (p. 37).

The report also noted that the least developed countries, mainly in sub-Saharan Africa, parts of Asia and small island countries face a vicious circle of low education and skills, low productivity and poverty.”
It further claims more generally that “Inadequate education and skills development keep economies trapped in a vicious circle of low education, low productivity and low income” (p.v).

Two specific recommendations made in respect of the developing and less developed countries are worth noting. They are presented in the following statements from the report.

- “Improving coordination between prospective employers and education and training providers is an effective and feasible way to reduce the mismatch between education and training outcomes and employment opportunities” (p.38).

- “Encouraging workplace learning is one form of increasing private sector investment in skills development – targeting workers already in the workforce” (p.39).

The report presents three important reasons for employer involvement in training. The first indicates involvement in the “management of training institutions” which strongly implies a collaborative relationship between employers and educational institutions. Such a relationship would “keep institutions abreast of changing technologies, the kind of technical and ICT equipment used at the workplace...(and) the development of competency-based standards in close cooperation with industry can help training become more relevant so that the skills acquired improve trainees’ employability”. The second reason is that employers “can provide experiential learning by accepting interns or apprentices... that enhance the systematic and classroom-based knowledge learning through practical application.” The third reason is that “feedback mechanisms through which employers and the trainees they hire can systematically inform training providers of whether the quality of training matches on-job expectations” (p.38).

In the case of most developing countries, systems have been established for technical and vocational training by governmental and non-governmental agencies and policies have been adopted in most countries for the implementation of national qualifications frameworks (NQF) which recognise all the learning achievements of an individual “whether they were attained in the educational system or outside it, and whether they were learned formally or informally” (Zúñiga 2005:12). Zúñiga notes that “One of the greatest benefits of an NQF is that it facilitates a reference for lifelong learning and for progress in work and social life” (p. 12). Competency levels which are used by countries with NQF “correspond to a particular stage in formal education, and they show that a person has a certain collection of knowledge, skills and labour capacities obtained at this educational level or recognised through a process of certification which acknowledges experience as a source of competencies” (Zúñiga, p.12). Countries in
Latin America and the English-speaking Caribbean have established Vocational Training Institutes (VTI) and, according to Zúñiga, the institutional structure in Latin America in particular has contributed to the development of the competencies approach. In the Caribbean the National Training Agencies (NTA) were established “for making technical and vocational training more effective and for closing the gap in skills” (p.65). Collaboration among the NTAs and with Unions and employers has promoted the formulation of the national qualifications framework.

The Zúñiga study notes that possession of key competencies makes it easier for individuals to “obtain employment, to remain in it, and to easily adapt to the changing demands of the labour market” (p.84). In countries with low levels of schooling this becomes difficult. In Latin America and the Caribbean the coordination of “education and work” as well as the establishment of “an institutional design for lifelong learning” (p.77) remains an imperative. One might argue that better articulation between technical and vocational institutions and universities and collaboration between employers and the institutions for higher learning is one way in which a design for skill development and lifelong learning might be achieved.

The findings of the studies done in OECD countries are instructive. The ILO (2008) report noted that “The systematic application of knowledge and science to producing goods and services has greatly increased the value of education and training for women and men.” It cited a comparative study of selected OECD countries done by van Ark et al. (2007) which reported “the general downward trend in the share of low-skilled workers and the increase in the share of highly skilled workers in industry” (p.19). In addition, the report found that “Productivity growth and rising education levels in the labour force have been associated with faster employment growth” (p.19) and it noted more generally that “Education, training, and lifelong learning foster a virtuous circle of higher productivity, more employment of better quality, income growth, and development”(p. 1). This observation appears to be borne out in the OECD countries as the findings in the report Education at a Glance 2009 seems to indicate. The key findings on indicator A6: How does participation in education affect participation in the labour market point to the positive relationship between educational attainment and employment. The indicator A6 examined the relationship between educational attainment and labour force status for both males and females for the period 1997 – 2007). The following are a few summary statements of the key findings.

- “Employment rates rise for both males and females with higher levels of educational attainment. With few exceptions, the employment rate for tertiary graduates is markedly higher than for
upper secondary graduates. For males and females, the gap between upper secondary graduates and those without an upper secondary qualification is particularly wide” (p.119).

- “Those with low educational attainment are both less likely to be labour force participants and more likely to be unemployed. Differences in employment rates between males and females are also wider among less educational groups” (p.119).

- “Differences in unemployment rates for males and females generally decrease with higher levels of educational attainment” (p.124).

- “The most vulnerable group of individuals are thus the lower educated and it is likely that unemployment rates for those with below upper secondary education will once again increase sharply as the economic downturn starts to affect the labour force” (p.125).

- “Once an individual is outside the labour force for an extended period it is, in many instances, difficult to reverse this situation because of skill obsolescence, deteriorating incentives to seek employment and other barriers to labour market re-entry” (p.125).

Among the pertinent deductions one might make are (i) the strong positive relationship between educational attainment and employment and (ii) the importance of ongoing training for continued employability. The findings which show a strong relationship between successively higher levels of education and employment rates suggest that universities have an important role to play in lifelong learning, and fostering the employability of individuals. This paper takes the position that the latter can be effectively achieved through the implementation of ICT and e-learning approaches.

III. The role of universities in fostering employability and skills development through e-learning

The World Summit on the Information Society (WSIS) at its meetings in 2003 and later in 2005 made several statements regarding the use of ICTs and developing a global information society. Some of the statements made with reference to education are relevant to the concerns being addressed at this meeting. Commenting specifically on capacity building (p.4)9 it was noted that the building of institutional capacity was important in the context of the “wide range of ICT and information specialists required at all levels” (p.4). The WSIS also called for the promotion of the use of ICTs “in all stages of education, training and human resource development” and noted an essential contribution that could be made to

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employability by “continuous and adult education, re-training, life-long learning, distance-learning and other special services.” In their view, people would benefit “from the new opportunities offered by ICTs for traditional jobs, self-employment and new professions.” The statement ended with the assertion that “Awareness and literacy in ICTs are an essential foundation in this regard” (p.4). Noting the potential for ICTs to contribute to the achievement of universal education worldwide “through delivery of education and training of teachers, and offering improved conditions for lifelong learning”, the WSIS called for the development and promotion of “programmes to eradicate illiteracy using ICTs at national, regional and international levels ... (and) to promote e-literacy skills for all... with the cooperation of all stakeholders (and with the need to eradicate adult illiteracy, ensure that young people are equipped with knowledge and skills to use ICTs, including the capacity to analyse and treat information in creative and innovative ways...” (p.5).

Simmons (2006:2) argues that the flexibility and availability of E-learning makes it “an ideal vehicle for organisations (including universities, one might add) to promote learning opportunities to employees (and to students” (p. 2). Accessibility of programmes online facilitates the use of e-learning for educational purposes. Given the need for a wide range of materials, courses and programmes for training individuals for the labour market and to help them maintain their employability within the market, universities can make a contribution in this area, maximising on delivery of services by the training of trainers in the use of e-learning approaches and other modalities that can facilitate delivery and independent learning. Strivens and Grant (2000), referring to the educational policy for lifelong learning in Britain observe that independent and self-directed learning are necessary requirements for lifelong learning, particularly the requirement for “the early development of skills to plan and improve one’s own learning” (p.41). Attention has focussed on bundles of skills, generally referred to as “employability skills” and the need for understanding those skills that are in demand in the labour market and the specific ones for which the learner has to prepare in order to fill in an adequate way the need for the specific job. This implies that institutions will need to tailor selected programmes to address learner needs for employability. Strivens and Grant also suggest that “if learners have an accurate awareness of their levels of achievement in employability skills, in conjunction with a desirable skill profile for a job or a range of jobs, they will be able to recognise when and where they need to improve their level of skill” (p.42). The ability to engage in critical self-assessment is therefore a meta-skill which learners would find useful.

A study on the Impact of E-learning on Employability skills Development conducted by the Department of Education, Employment and Workplace Relations in Australia (2009) reported that VET practitioners who had participated in the consultations for the study had indicated that “an explicit focus on
employability skills using active learning strategies drives learner engagement with VET”; the learners were said to be “more motivated (a factor which) aids learner achievement and retention” (p.26). The study also reported four best uses of e-learning and concluded that “The skill of ‘learning’ underpins all the other employability skills and thus there is an advantage in focusing on ‘learning to learn’ as a foundation for addressing the other employability skills and to equip learners with the skills to maintain vocational competence over time” (p.27). A suggestion made by Yorke and Knight (2004) and cited in the ESECT Series 2 paper was the embedding of the employability into the curriculum as a means of helping “learners to construct understandings of the subject matter and maintain the more recent interest in developing a number of skilful practices...” although it is acknowledged that there is no “single, ideal prescription for embedding employability” (Little et al 2006, p.6). Focusing on part-time students and employability, Little et al suggest that “engaging with part-time students’ pre-university experiences ... (and with) their concurrent workplace experiences’ are strategies that may help them “consider opportunities for advancement” (p.15).

The literature emphasises the point that new learning technologies can provide a means through which people can improve core lifelong learning skills and acquire additional competences that they may require for purposes of employability. The point has been made that in these uncertain times in which information and communications technology is rapidly developing, universities need to “re-consider the development and assessment of graduate attributes from the perspective of lifelong learning” (Su Ya-hui, and Feng Li-yia 2008:1) but the authors cite Barnett’s (2006:61) caution that these attributes should not be considered as skills but as “certain kinds of human dispositions and qualities” (p.2). In the context of the latter, Su and Feng propose a holistic approach to the assessment of graduate attributes. The suggestion is made in the literature that recognition of prior learning (RPL) should be taken into consideration as this is likely to “open formal economy jobs to those who have not had the advantage of formal vocational training” (ILO Report 5, p. 45); this presents the question as to whether universities, particularly in developing countries, can create a collaborative niche with TVET institutions to develop a system that can facilitate development for employability without lowering standards. The development distance between OECD countries and the rest which leads, among other things, to what is called the digital divide, calls for institutions of higher learning in developing countries particularly to find innovative ways of building valuable human resources. The ‘how’ is an important question to which we must turn our attention and the network of institutions represented at this meeting will provide opportunities for learning about best practices and for forging collaborative links that might narrow that divide.
References


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