QUALITY ASSURANCE IN ODL
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ABSTRACT
Open and Distance Learning (ODL) while not new elsewhere in the world, it is in fact so in Malaysia. The Malaysian government is consciously espousing ODL in order to improve and increase access to higher education by the 84% of Malaysians who are still unable to do so. The Malaysian government is also highly aware of the need to ensure quality in this novel venture. This paper explores the major factors that determine quality in the ODL setting. It uses a systemic analysis of teaching, learning and academic support for such a setting and identified the engine that drives the whole ODL system in ensuring overall quality. It also proposes the sections within a university that should be tasked with the various quality processes and emphasizes the critical roles of the university quality coordinator. The paper presents a series of checklists that could be used in a simple way by even those who are not quality practitioners or process owners. This is a breakthrough in implementing quality assurance for departmental staff could carry out standard operating procedures without even referring to the word quality or knowing that s/he is indeed carrying out quality procedures. While the study is based on clinical observations over 15 months at Open University Malaysia, the proposal to implement this system is still being considered by management.

INTRODUCTION
Much has been discussed about the pedagogy of Open and Distance Learning (Johari et al (2005)) but little discussion seems to have taken place about Quality and Quality Assurance in such a setting.

Being a novel learning method for many Malaysians, the efficacy and effectiveness of ODL in Malaysia in fact need a lot more exploration than the pedagogy itself. Quality Assurance is proposed here as the unifying and integrating mechanism in exposing potential challenges that will help to improve the buy-in of ODL in Malaysia.

Quality Assurance in higher education has had a foothold for sometime now (Barnett (1992), Gordon (2005), Green (1994), Harvey (2002), Idrus (2004)) and in many countries is seen to be an imperative for government funding and indeed survival as can be seen in the formation of the Australian Universities Quality Agency and in the UK Quality Assurance Agency. Admittedly the literature on this has concentrated mainly on traditional higher education and less if any on ODL.

This paper therefore is one of if not the first attempt at exploring quality assurance in ODL. In particular it does so in the Malaysian context and using the experiences of the country's first Open Learning University.

QUALITY ASSURANCE IN HIGHER EDUCATION
As is known the concept of Quality and all its derivatives originated in manufacturing and as such had found some formidable resistance for acceptance in education generally and in higher education in particular. However, the advent of new technology and the massification of education had seen a lot of reduction in this resistance.

In the UK for example Her Majesty's Inspectorate (for education) concept had been replaced by the now more acceptable concept of assurance as reflected by a new agency called the Quality Assurance Agency (QAA). Instead of inspecting, a'la Quality Control, QAA is involved in assuring. Similarly in Australia, the Australian Universities Quality Agency (AUQA) does not inspect but helps to assure quality at Australian universities.

Some universities in some countries have gone on to be certified to various standards such as the ISO 9001:2000.
In Malaysia, the premier university, Universiti Malaya is ISO 9001:2000 certified as is the Shah Alam Politeknik. At Open University Malaysia (OUM) the approach to Quality has been more distributed. Three departments have been ISO 9001:2000 certified in 2005 and four more are being prepared for certification audits in 2006.

In Indonesia a number of private universities, such as Bina Nusantara in Jakarta and Widyatama in Bandung are ISO 9001:2000 certified while one semi government institution the Hospitality and Tourism Academy was ISO 9002 certified.

Despite the somewhat initially harrowing bureaucratic imposition, many of these institutions have now even become advocates for ISO 9001 and other quality standards certification.

Other experiences in implementing Quality Assurance and its associated methods showed a triple increase in student enrolment in one faculty at an Australian university, a sustained 9% growth for five years at a polytechnic in New Zealand, a $1 million savings in one year at the same institution and a 72% increase in enrolment at an MBA Graduate School of Business in Indonesia.

In short, Quality in Higher Education has become an accepted part of the operation of such institutions and has indeed made a difference to the bottom line of higher education.

QUALITY ASSURANCE IN ODL

While QA or quality has been accepted institutionally in higher education, to apply same to a learning construct is another matter. A lot of the resistance in the past has been brought about by academics’ sincere belief that they were already implementing quality in what they were doing and that they know best what quality is to be implemented, where and when.

The academics of course have ensured that their lectures, tutorials, continuous assessments are of a high standard and their final examinations are of a level that they are proud to compare with any other examination papers in the same discipline anywhere. They who are in the know have ensured these and they are the subject matter experts.

These as we now know are inputs and the system is therefore input-driven, while quality requirements as has been incessantly stated are output or even outcome driven.

It is known that even in the manufacturing industry, the move from input-driven, such as in Quality Control (QC) to output- or outcome-driven such as in Quality Assurance and TQM, had been with considerable resistance and reluctance. It has taken this industry a long time for such transition.

The situation in education is exacerbated by some pedagogical theories and educational practices that anticipate failures. Such theories and practices of course sit well with the QC concept, since QA expects no failures at all.

Hence, a discussion on QA in ODL must have the following underlying assumptions:

a. accept the move from QC to QA in the education system
b. hence accept the move from input-driven to output- or outcome-driven
c. accept the concept of customers in education
d. that in ODL communication technology is pivotal
e. that in ODL self-motivation by the learners is essential
f. that in ODL the engagement between the learner and the teacher is unique
g. that in ODL the roles of the teachers are non-traditional
h. that in ODL the learning instruments must be customer-oriented and user-friendly
i. that in ODL the quality requirements of the system, the teachers and the learning instruments are more demanding than in the case of traditional education
j. that new challenges need new, novel, non-traditional and unorthodox solutions
The above list is by no means exhaustive but it is a good start, since we have to start thinking outside the box as it were. Figure 1 below shows a very simple systemic model of QA in ODL.

**Modeling QA in ODL**

* Includes specific so called Study Guides, but Learning Guidelines are much broader
** Includes physical and virtual learning environments.

*Figure 1  Simplified systems model of ODL*

The ODL provider will need to start from the right hand side of the above figure in line with the output- or outcome-orientation or being so driven, and move to the left.

As seen above, the **Outcomes** are tempered by the **Outputs** and this provides the focus of the **Outcomes**. After all, job promotion for example could be gotten some other ways other than through being a graduate with the new knowledge, skills and qualifications. Similarly with all the other outcomes shown.

By the same token, the **Outputs** are also tempered by the **Outcomes**. Thus the pursuit of new knowledge, skills and qualifications is not just for their sakes. This interconnectivity between **Outcomes** and **Outputs** is not only true in the case of ODL but is more so compared to the case of fresh from high-school full-time students at traditional universities.

Indeed the part-time ODL students in OUM’s experience are working people who wish to upgrade their qualifications in order to get promotion or a better chance for a higher position in their organizations or elsewhere. If we are Quality minded then we have to consider these **Outcomes** in deciding on the **Fitness for Purpose** which defines Quality, as we progress from the right-hand side of Figure 1 to the left.

By considering the outcomes we have essentially answered the question **Why?** to the outputs, that is, why new knowledge, why new skills and why new qualifications.

The next question that we have to ask of the outputs is the **What?** as in what new knowledge, what new skills and what new qualifications.

In both of the above cases or questions (Why and What) we could get the answers by doing market surveys of our potential customers. However, we must have a formidable, highly skilled, analytical and strategic thinking Marketing and Planning capabilities. It is one thing to collect data, another to analyse them and yet another to use them in strategic planning and execution.
Quality is multiplicative

It is important to realize that the overall quality is the product of all the quality of the elements of the system. This means that the overall quality of a system is directly dependent on the lowest quality level of its elements.

This also means that we have to ensure that every element of the system has the highest quality level. Thus, referring to Figure 1 above, we must make sure that the quality of all the input elements and process elements are of a very high level in order to get a quality output.

The following paragraphs therefore discuss every possible aspect of the system that would impinge on the quality of the output (and outcomes). Given that we need to find out the why and what using a survey, we must therefore ensure that the survey is of quality and gets the information required efficiently and effectively.

Ensuring quality survey, analysis and strategic planning

Knowing that any collection of data is followed by an analysis and the analysis is meant to help in planning for the future, in other words, strategy, the three items are herewith discussed conjointly. One of the simplest and easiest to implement way of ensuring quality is to use a Checklist. An example for a quality survey is shown in Table 1 below:

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST ITEMS</th>
<th>√</th>
<th>?</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Questionnaire has a stated objective</td>
<td></td>
<td></td>
<td>If not, then do so. That is write it down, because only after you wrote it down that you could improve it.</td>
</tr>
<tr>
<td>2</td>
<td>Each Question has its own stated objective or intended type of answer</td>
<td></td>
<td></td>
<td>If not, then do so by referring to the Questionnaire objective</td>
</tr>
<tr>
<td>3</td>
<td>Each Question clearly states its intention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Each Question conveys only one meaning to the readers or respondents</td>
<td></td>
<td></td>
<td>You can check this by examining each word used in the Question and assess if any of them is ambiguous or ambivalent. Replace these words with those that eliminate or reduce such ambiguity and ambivalence</td>
</tr>
</tbody>
</table>

The number of questions is limited only by our imagination and ability to delve deeper into the requirements, the accuracy required and so on. In this case, for example, the total number of questions included in the Checklist is 14 that includes distribution, collection and verification.

Figure 2 shows a probable system by which the survey, analysis and strategic planning may be carried out in a quality way.
Figure 2 The Survey, Analysis and Strategic Planning (SASP) Engine

The Outputs and Outcomes (from Figure 1) are considered by the SASP Engine in formulating its survey plan of the potential customers. As part of the survey plan an appropriate quality assured Questionnaire is developed and becomes an input also to the SASP Engine. The resulting Strategic Plan becomes the objectives and goals of the Process and Inputs of the system shown in Figure 1.

Assuring the quality of the Learning Process
The questions that must be asked here are how quality or how pertinent or how appropriate and fitting are the processes of learning, feedback, testing, exams and so on in the Learning Process, given the Strategic Plan produced by the SASP Engine and taking into consideration the Outputs and Outcomes that became inputs into the SASP Engine.

Quality Learning
Quality Learning is achieved when the following conditions are met:

a. that the objectives of the learning are completely met
b. that both the customers/students and providers are completely satisfied with the learning outcomes
c. that the feedback, testing and examination all met their respective objectives and their outcomes are satisfactory to both the customers/students and the provider
d. that the customers’/students’ outputs and outcomes are realized
e. that it was done in the most effective and efficient manner, normally measured by the minimum learning time and done at the least cost
However, we still need to have defined the various objectives, the satisfaction levels, the measurement methods, the accuracy of the measurements, the correctness of analysis and so on. Once again, the use of Checklists is potent. Space does not allow us to show the 12 Checklists used in this case though these will be shown at the conference.

**Assuring the quality of Inputs**

Referring back to Figure 1, the Inputs to our system are reproduced below in Figure 4. As mentioned earlier the list of items there is definitely not exhaustive. What are shown, however, are considered essential in a discussion of quality. The Figure also shows the elements of each of those Inputs that need to be considered in order to help assure the quality of the Inputs. These are based on the Learning Strategic Plan produced by the SASP Engine shown in Figure 2.

![Figure 3: The System's Inputs and their quality elements](image)

Checklists are then used for each one of the items in the Inputs to ensure the quality of these elements. Importantly, we have to recognize that the students are *both* customers and inputs to the system. Being the latter means that we have to make sure that they are also of quality level we require to ensure quality outputs and outcomes.

**IMPLEMENTATION**

Implementation is an integral part of any system and must therefore be seriously considered. Otherwise there is no point embarking on the system in the first place. Below is a flow chart to implement the system that has been discussed above.
MONITORING, CORRECTING & CORRECTIVE ACTIONING

PRECONDITIONING PROGRAM
A deliberately prepared program for top management, so that all members of top management practice the adoption of continuous improvement internally and overtly

PRECONDITIONING
deliberate manifestation of top management’s

CONFIDENCE BUILDING
among the staff and between the staff

ORGANIZATIONAL VISION
Ensure that everyone within the organization understands what it is, what it stands for and that there is a

APPLY ALL ABOVE FOR EACH OF THE DEPARTMENTS INVOLVED
with the intention of all depts in the university applying as well (see Table 12 for the depts involved at this stage)

All above supports also to each of the depts identified at
Figure 4 Guide to implement QA in ODL

CONCLUSION

This paper has proposed a systemic model to ensure quality in open and distance learning. A breakthrough using checklists helps to do this in the simplest way for anyone to use.

REFERENCES

Barnett R (1992) Improving Higher Education- Total Quality Care, OU Press, UK


Harvey L (2002) Quality as transformation Quality in Pedagogy Seminar, Braga, Portugal


Idrus N (2002b) Challenges to sustaining quality in alternative learning methodologies Keynote Paper, South East Asian Association for Institutional Research (SEAAIR) 2nd Annual Conference, Legend Hotel, Kuala Lumpur, Malaysia 23 – 26 October 2002


Johari, Haryate, Abas ZW, Zulkarnai AR (2005) Quality Assurance in the development of Open Distance Learning Materials at Open University Malaysia 5th SEAAIR Conference, Bali, Indonesia