

Outcomes in Distance Education:
A comparative study of selected Asian Open Universities

*Ng, Fowie; Kwok, Louisa; Tsui, Cecilia; Zhang, Wei-yuan & Jegede, Olugbemi,
The Open University of Hong Kong*

Abstract

The higher education sectors are constantly moving towards the incorporation of explicit measures of the outcomes of their activities. It is especially important in the context of distance education to address the issues of being accountable to the society. This paper presents the comparative study of the dimensions of outcome indicators employed by the distance learning institutions at the Asian region. By means of both quantitative and qualitative approaches, the relative importance of the outcome indicators from teaching, research, consultancy as well as cultural and social activities were analysed in an attempt to understand the differences among the perceptions of outcomes employed by these institutions in the region as well as important issues about the topic.

Introduction

Institutions of the higher education system internationally are now experiencing a constantly changing demand from various stakeholders in a lot of areas. The issues of accountability have been raised in which a clearer picture of what are the outcomes from the higher education sector is being addressed. In particular, the measurement of outcomes in the design and delivery of effective open education programmes are of paramount importance in the attempt to understand the through-put and the end product. Hence, various parameters and metrics have been developed and adopted to measure the performance of both the conventional tertiary education institutions as well as the distance and open education providers. To this extreme, it is even more difficult and problematic in identifying proper and commonly agreed performance indicators of outcomes in open learning institutions. Research results currently available are limited to address this issue across different providers especially the Asia regional context. Hence, this paper investigates the complexity and discusses the results from a comparative study of the outcome indicators from the perspectives of open and distance learning providers in the region.

Outcome Indicators in Conventional and Distance Education Institutions

Shale and Gomes (1998) argue that distance education has always been subject to especially accountability to the public and government for funding priority in terms of the outcomes achieved. One of the reasons is that there is the unique process of organizing and delivering the knowledge compared to the conventional mainstream of tertiary education. Some of the key indicators of the conventional university providers such as number of degrees awarded, graduation rates, research grants and time to degree completion may not be adequate enough to explain the complex phenomenon in distance and open education system. In Hong Kong, for example, the use of indicators about research output via research assessment exercise among conventional universities are heavily emphasized rather than teaching output (Ho, 1998). These government funded

universities indicate to their faculty members to solicit research grants and to publish so that the reputation and the funding to the faculty will be increased. Moreover, this set of particular outcome indicators will eventually affect the human resources of the faculty in terms of their career path such as substantiation, crossing efficiency bar and the renewal of contract. On the other hand, the overwhelming drive for quality assurance and assessment have elicited the way how tertiary sectors are being assessed and what should be the key indicators of quality in higher education (Harris et al., 1998). The adoption of indicators used in conventional universities would not be automatically be transferred to the distance education sectors. It will need more detailed approach to incorporate views from the staff, students as well as the society and government.

Rumble (1981, 1992) has described how to evaluate the output of a distance education institution and the four criteria for use in evaluating the achievements of distance education system. Both the response time taken to produce a graduate and the output-input ratio were included in his assessment. He has also suggested the four possible evaluating criteria which may include 'providing opportunities for access to education and training'; 'completion and drop-out rates'; 'the quality of output'; as well as 'cost-efficiency and cost-effectiveness'. Some other academics advocate that distance teaching can have other outputs which are not obvious such as the use of teaching materials in other institutions (Woodley and Kirwood, 1988). With the increased use of technology in distance education, the evaluation of the cost-benefits of technology-based teaching is also needed as well as their impact. (Bates, 1997). Other author will define criteria for 'quality teaching' in distance learning programme such as whether tutors can enable students to achieve the learning objectives of the course (Hunt, 1998). Hence, a mixed approach is being adopted to suit the institution's own requirements in a summative and formative way.

Distance learning is now at the height of fashion. Number of enrolments are immense especially at those mega-universities (Daniel, 1996; 1999). Despite that, quality of teaching and learning should not be jeopardised. The system approach to organization suggests that open university can be treated as the production function. It consists of input, throughput and output. The outcomes should be reflected by the aims of the university concerned including the mission, vision and the key objectives. Jones and Taylor (1990) envisage that universities aim to produce four major types of outputs. These are derived from teaching activities; from research activities; from consultancy and related activities as well as cultural and social outputs. From the complexity of different types of outputs, this classification may help us to concentrate to look at the more detailed problems and the challenges of outcomes and outputs behind this category.

The Study

The current study was funded by the President's Advisory Committee on Research and Development (PACRD) at the Open University of Hong Kong (OUHK). Apart from investigating outcomes, this project also look at the administration styles and educational processes as well. Regarding the part on researching outcomes, the study was undertaken to investigate in a comparative way of the dimensions of outcomes employed by distance learning institutions. It consists of four different stages. The first stage involved the use of electronic forum for discussion and reviews. Experts were invited to join the electronic forum from around the world. They can participate by sending comments, ideas through email managed by a specially created discussion list. A

renowned keynote speaker, Dr. Gordon Burt, was invited from the UK Open University to lead the discussion. The role of the keynote speaker will address key issues about a selected area for subsequent discussion via the web. On the other hand, one member of the research team played the role as a facilitator. The facilitator will pose questions, ideas and summarise the discussions. In order to accommodate the input from those who cannot access to email facilities, a subsequent stage two was implemented as a kind of follow up activity. Qualitative questionnaires were distributed to universities in Asia where email facilities are not widely available such as some parts in mainland China. Based on the results from stage one and two, a revised questionnaire was developed and sent to the senior management team and general staff of the distance education institutions to gather their views about the perception of the importance of the key outcome indicators and others. Stage four will consist of on-site interviews with the six selected Asian Open Universities including three mega-universities. It is expected that the interview will be finished by October, 1999.

Results

The stage one of the electronic forum has attracted 102 subscribers from 15 countries around the world. Dr. Gordon Burt from the UK Open University gave his keynote address and subsequent discussions. Major results were reported elsewhere (Kwok et al., 1998). However, it is worthwhile to mention the emphasis in which some governments will demand greater accountability in learning and research from the academic society. Questions should be asked about the use of same indicators by government to assess all universities within their countries. Both the values and processes are important when outcomes are to be evaluated. In addition, the notion of 'systematic investigation of the worth or merit of an object' and the six key issues of 'ethics', 'coverage', 'costs', 'objectives', 'effects', and 'stakeholders' can also be applied to evaluate distance education institutions.

During stage two, questionnaires were sent to 68 open universities and 46 conventional universities in Asia in which 40 representatives from 32 open universities completed the questionnaire. On the other hand, 8 return questionnaires were received from the 8 conventional universities. Questions were asked about, for example, what should be included when measuring outcomes of open and distance education and how do outcomes affect the people in their institutions. As a result, different opinions were received. Apart from traditional indicators commonly found in the literature, it is interested to see some of the views of the possible indicators and comments as follows:

- 'I will recommend this University to my friends'
- 'Placement of graduates and their job performance'
- 'Social recognition to the graduated students'
- 'Equality, access, cost, improvement in quality of life'
- 'Adjusting the next semester teaching plans according to the evaluation of the goal'
- 'The outcome should be divided into short, median and long term'
- 'The quality and number of course material'
- 'Student persistence, efficiency and popularity of the university'
- 'Examinations should be unified such as outline, questions, time, venue and grading system'
- 'The work and the element of living standard of the staff will be improved'

In view of the vast differences of those proposed indicators from stage one and stage two, it would be useful to categorise them into the model proposed by Jones and Taylor (1990). Hence, a quantitative questionnaire was constructed to ask the relative importance of those key indicators under the four areas of that model. A total of 104 questionnaires were received from general staff (GS) and another 125 copies were received from senior management team (SMT) members of the various universities out of a total of 448 questionnaires sent. Respondents were asked to comment on the relative importance of the indicators on a scale:

Most				Least	Don't
Important				Important	Know
5	4	3	2	1	0

The results are selected and presented here with the total percentage of choosing scale 4 and 5 on the respective indicators for senior management team (SMT) and general staff (GS) respectively.

Table One: Relative Importance of outcomes indicators in percentage perceived by senior management team (SMT) and general staff (GS)

	SMT	GS
1. Teaching activities		
1.1 Number of graduates	76	78.9
1.2 Completion Rate	64	44.2
1.3 Drop-out Rate	47.2	40.0
1.4 Persistence Rate	51.2	44.2
1.5 Graduation Rate	84.8	83.7
1.6 Placement performance of stds	74.4	63.5
2. Research activities		
2.1 Number of referred publications	88.8	70.2
2.2 Number of non-referred publications	42.4	43.3
2.3 Number of grants received	71.2	54.9
2.4 Monetary amount of research grants received	75.2	54.8
2.5 Number of research awards	80.8	51.0
3. Consultancy projects and related activities		
3.1 Number of consultancy projects	64.0	37.5
3.2 Monetary amount of consultancy projects	61.6	33.7
3.3 Proposal acceptance ratio	64.0	41.4
4. Cultural and social outputs		
4.1 Practical use of knowledge in society	93.6	76.0
4.2 Opportunity for access to education and further education	77.6	71.1
4.3 Ethical issues	82.4	58.6
4.4 Relevance to society needs	94.4	77.9
4.5 Social recognition of the graduates	90.4	75.0
4.6 Knowledge and skill upgrade	90.4	75.0

Discussion and Conclusion

We can see that key indicators with more than 75% on scale 4 and 5 in both SMT and GS from table one include the following items:

- 1.1 (number of graduates),
- 1.5 (graduation rate),
- 4.1 (practical use of knowledge in society),
- 4.4 (relevance to society needs),
- 4.5 (social recognition of the graduates), and
- 4.6 (knowledge and skill upgrade).

Among those ranked by the senior management team, item 4.1 (practical use of knowledge in society) was given the highest percentage (93.6) which could reflect the importance of societal expectation on the usefulness of knowledge learned from distance education institutions. On the other hand, item 1.1 (number of graduate) was given the highest percentage (78.9) by the general staff. It is interested to see the differences between the perception by senior management team and the general staff in areas such as number and monetary amount of consultancy. In addition, the common differences in perception by both senior management team and general staff between referred and non-referred publications. The widest gap happened in item 2.5 (number of research awards) in which general staff gave a lower priority compared with the senior management expectation. With the great variety of outcome indicators in the literature, it is a fruitful trial to give a general picture of the indicators under the four areas.

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Biographies of the authors

Fowie Ng is currently the Lecturer at the Centre for Continuing & Community Education of the Open University of Hong Kong. His specialisms include Health Services Management, Quality Management and Public Policy. His current research interests include Patient's Charter in the health services, quality in non-local courses in Hong Kong and outcomes in open learning.

Louisa Kwok has served as an academic in the School of Science & Technology, Open University of Hong Kong (formerly Open Learning Institute of Hong Kong) since 1990. She was a mathematics assistant lecturer in Hong Kong Baptist College from 1980 to 1985 and a mathematics lecturer at Hang Seng School of Commerce from 1985 to 1990. Her particular research interest is in the area of mathematics education, especially on adults learning mathematics with the availability of mathematics software.

Cecilia Tsui joined the Open University of Hong Kong in 1995. She is an Assistant Professor in Business and Management. Prior to that, she had worked for multinational corporations in trading and banking fields for some years. She had 11 years' experience as a business educator as well as an administrator at a tertiary institution in Hong Kong. Her major research interests specialize in human resource development as well as educational administration and management.

Weiyuan Zhang had BEd and MEd degrees from East China Normal University and a PhD from the University of Edinburgh. He was a post-doctoral fellow at the University of Hong Kong from 1996 to 1997. He has had fourteen years' research experience as an educational researcher at East China Normal University, the University of Victoria, the University of Edinburgh, the University of Hong Kong. Since 1998 he has been a research fellow at the Open University of Hong Kong. His research interests are open and distance education, comparative education, education in Greater China, educational psychology, guidance and counselling.

Olugbemiro Jegede is Professor and Director, Centre for Research in Distance & Adult Learning at The Open University of Hong Kong. Prior to this he was Foundation Head of the Research and Evaluation Unit, Distance Education Centre, the University of Southern Queensland, Toowoomba, Queensland, Australia. He was also the Foundation Dean and Professor at the Faculty of Education, The University of Abuja, Nigeria. He is the Editor-in-Chief of the electronic Journal of Instructional Science and Technology and serves on the Board of a number of other journals in distance and open learning, science education, and computer-mediated communications.