

**INTERNATIONAL RESEARCH FOUNDATION  
FOR OPEN LEARNING**

*Asian research on open and  
distance learning*

*By David Murphy and K S Yuen*

**INTERNATIONAL RESEARCH FOUNDATION FOR  
OPEN LEARNING**

**CONTENTS**

1	Introduction	4
2	Opportunities And Barriers	4
3	The Role Of The AAOU	5
4	Country Reports	5
	China	5
	Hong Kong	7
	India	8
	Japan	8
	Korea	9
	Malaysia	10
	Sri Lanka	10
	Taiwan	10
	Thailand	12
	Vietnam	12
5	Conclusion	13
	Bibliography	13

First published 1998 by:  
International Research Foundation for Open Learning  
12 Hills Road  
Cambridge  
CB2 1PF  
UK

Copyright © Institute of Community Studies 1997

Printed in the United Kingdom by International Research Foundation for Open Learning,  
Cambridge

All rights reserved. Apart from any fair dealing for the purposes of research or private study, or criticism or review, no part of this book may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing from the publisher.



## **1 Introduction**

Within the Asian region, open learning is a relative newcomer. Nevertheless, there has been massive growth in the number of institutions and students studying by distance education, so that Asia now has by far the largest number of students using this mode of education, compared to other regions of the world. Five of the mega-universities (those with over 100,000 enrolments), as identified by Daniel (1995), are in the Asian region.

Most of the impetus has come from the concentrated efforts of central governments, with the establishment of dedicated open learning institutions. Country after country in Asia has established its own Open University, and most of them have a clear mandate to engage in research and development

## **2 Opportunities and Barriers**

The growth in the number of DE institutions in Asia in recent years has created significant opportunities for research in the region. The advent of new institutions, new courses, new groups of students and new approaches to open learning have created an enormous need for well-designed research programmes into a variety of aspects of this mode of teaching and learning. Thus far there is clear evidence of research taking place all over Asia, though much of it is small scale and often unknown outside host institutions. Information on some of this research is contained in the next section of this report. Other Asian research on open learning has found its way into the main journals in the field, often as a result of Asian academics spending time overseas in longer-established distance education centres.

However, a number of barriers, including cultural and political factors, along with language, have meant that progress has not been rapid. Attempts to establish centres of research and/or regional journals have not always been successful, having lost impetus after initial enthusiasm. As well, the simple fact that most of the institutions are relatively new has meant that scarce resources are usually devoted to establishing programmes and systems, adding to the problem. Further, once the institutions do get involved in research projects, often the work is strongly focussed on institutional research. Clearly this is going to continue to be important, but the situation does need to be balanced with more generic work.

The language barrier to the spread of information about research in open learning in Asia will not be overcome quickly. If research is to be useful to its host institution and its home country, then there are

strong arguments for such research to remain in the first language of the nation. So it is likely that a mix of languages will continue, with research with international implications finding its way into the main English language journals from time to time. In recognition of this problem, some journals are bilingual. The Bulletin of the National Institute of Multimedia Education, for example, is mostly in Japanese, but does have English abstracts for all articles, and usually includes one English language article.

### **3 The Role of the AAOU**

This year the Asian Association of Open Universities (AAOU) will host its Tenth Annual Conference in Iran. The conferences are the focal point of the Association's activities, and provide an opportunity for Asian researchers in open learning to offer their ideas to a wide audience. The Ninth Conference was held in Taiwan, and sponsored by that country's National Open University. As usual, the Proceedings were published (AAOU, 1995b), and consist of 70 contributions from 12 countries. The specific themes covered by the papers are multilateral co-operation, application of media and technologies, curriculum and practice issues. Though few of the papers could be classified as research, many discussed the role of research in open learning, particularly the balance between institutional research and the opportunities for international collaborative research. Much useful information about Asia's open universities can be found in the proceedings. The Tenth Annual Conference of the AAOU will be held in Tehran, under the theme of Innovations in Distance and Open Learning. The Conference Secretariat is the responsibility of Professor M.H. Bijan-zadeh at Payame Noor University, Iran.

### **4 Country Reports**

This section provides details of specific Asian research activity by country, arranged alphabetically. Much of the information has been obtained through the co-operation of professional colleagues and acquaintances in the Asian region.

#### **China**

It is fitting that China should be the first country to visit, as it clearly has the largest open learning system in the world, through its network of Radio and Television Universities (RTVUs). The RTVUs, established in 1979, built on earlier work of correspondence colleges and autonomous radio and television institutes in large cities, and were given a major boost in 1988 with the launching of two

communications satellites by China. Millions of students have now graduated from this immense open learning system. The system continues to evolve, with a comprehensive account of their growth and operation being given in *Radio and TV Universities: The Mainstream of China's Adult and Distance Higher Education* (Wei & Tong, 1994).

In 1986, CRTVU successfully applied for a loan fund from the World Bank to undertake a large scale nation-wide survey. It was a national 'tracer study' on its 1982, 1982 and 1986 graduates, which number totalled over 320,000. The study was carried out during 1986-89, and it surveyed and assessed various aspects of the 'quality' and 'usage' of CRTVU graduates. Questions asked in the survey include: Have RTVU graduates attained the intended academic and professional level? Are the knowledge and skills gained in their studies useful to their jobs? Are graduates properly placed in their work? What are the patterns of 'usage' of RTVU graduates? The data and subsequent analysis are very useful for the improvement of the quality and cost effectiveness of open learning in China and in Asian countries.

Recent reports from China indicate a growing excitement within the ranks of distance educators, as change provides opportunities for professional growth. New courses, and the increased openness of the networks, are instilling a sense of what has been described as 'euphoria' amongst some of those involved in open learning . As well, a number of Chinese distance educators have been spending time overseas developing their ideas and in some cases obtaining higher degrees. This is likely to give increased impetus to research, as their effect filters through the system.

An example is Zhang Ji-Ping, who has just completed a PhD at the University of Twente, and is returning to the East China Normal University in Shanghai. His thesis (Zhang, 1996) is particularly intriguing, in that it concerns the development of a computer-based 'Teaching Models Toolkit', which can be adapted for application to a variety of teaching models. Ten teaching models are incorporated into the package, with five from each of the Western and Chinese traditions. It is planned to refine and further develop the package in the near future.

Major research projects are under way or have recently been completed. For example, CRTVU has just finished a project called Quality Control System of Radio & TV Education and the Utility of Information Resources (1992-1996). The project covers five sub-areas: design and production of teaching materials; instructional design and quality management; faculty construction; continuing education using RTVE resources; and Liaoyuan program using RTVE resources.

Another interesting project is that of Wei Runfang , who is currently completing a book entitled RTVUs and the UKOU: A Comparative View. This is a major work of comparative research dealing with different distance education networks and systems. She was also the co-author of Wei and Tong (1994) with Prof. Tong Yuanhui of Jiangsu Radio & Television University, who has recently been spending time as a visiting scholar at Harvard University.

## **Hong Kong**

Although dozens of overseas institutions offer their courses to students in Hong Kong by a variety of avenues, the clear focal point of open learning in the territory is the Open Learning Institute of Hong Kong. Established in 1989, the OLI now has about 20,000 students enrolled in its courses. It is at the end of the process of achieving self-accrediting status, the first step to becoming a university.

To encourage research, the OLI has in recent years made funds available for research and development projects. While some of these have been discipline based, many have pursued investigations in a variety of aspects of open learning. The following list provides some relevant examples, some of which have now been completed:

- The study guide approach to computer aided learning design (see Lee et al., in press)
- Developing an interactive multimedia CD-ROM program to accompany AW213 (History of Hong Kong);
- Application of computer integrated telephony at the OLI;
- Adult learning and distance education - Asian perspective;
- The suitability of andragogy and action learning approaches to management education;
- A week in the life of an OLI student;
- A program of studies on spurning in nurses;
- Face-to-face tutorials in a distance learning system: perception and practice;
- Language awareness and language performance: how far are they related?;
- Pilot study investigating the potential for the use of the World Wide Web as an interface between the OLI and its students; and
- A study of the relationship between social structure and the needs and expectations of tertiary level distance education in Hong Kong.

Further strengthening its research commitment, the OLI has recently established a Centre in Adult and Distance Learning. Once fully

operational, the Centre will seek to form closer ties with others doing similar work in the Asian region. It is expected that the Centre will be fully operational by the end of 1996.

## **India**

Among the growing number of open universities in India, it is Indira Gandhi National Open University (IGNOU) that occupies central place. Established in 1985, IGNOU now has around 250,000 students, with an estimated annual intake approaching 100,000.

IGNOU also publishes the Indian Journal of Open Learning (ISSN 0971-2690), which first appeared in 1992, and is the prime outlet for the reporting of Indian research in open learning. The Journal was set up to:

- i) disseminate information about theory, practice and research in the field of open and distance education, including correspondence and multi-media education, educational technology and communication, independent and experiential learning and other innovative forms of education, and
- ii) provide a forum for debate about these areas of concern, particularly for India, allowing reasonable space to contributions from outside the country'.

Perusal of recent editions of the journal confirm that it contains a mix of contributions, but with a focus on issues of relevance to India. See, for example, Kato (1995), Sinha (1995) and Rathore (1995).

Also from India is the Kakatiya Journal of Distance Education, published since 1992. Examples of articles in a recent volume include Pandit (1994) and Sharma (1994).

## **Japan**

Open learning in Japan is represented by the University of the Air, an independent, single-mode distance education institution, operated by the University of the Air Foundation. The University offers a Bachelor degree and a range of community education courses, and is a member of the All Japan Association of Private Universities Correspondence Education (AJAPUCE) and the Asian Association of Open Universities.

Research in open learning in Japan takes place at the National Institute of Multimedia Education (Dr Hidetoshi Kato is the Director-General), which has close ties with the University of the Air. Current projects include:

- the comparative research, practice and evaluation of higher educational use of broadcasting and communication technologies;
- a survey of the use of various media in higher education;
- a study of educational technology as it relates to multimedia and emerging communication technology;
- developing various educational materials; and
- applying and perfecting new educational information systems.

The Institute's research is published in individual reports, and a substantial amount of it also appears in the Institute's Bulletin, a refereed journal published annually. Most of the articles are in Japanese, but all have an English abstract. A selection of relevant articles from the past three years is included in the references, with an indication of whether the article is written in Japanese.

Although it is a minority of the articles that deal directly with open learning, many should attract the interest of researchers working in the field. For example, Yoshida (1996) examines 'The Effects of Group Accelerated Learning in a Computer Training Course for Lifelong Education.' In particular, the author investigates the differences between working alone and in groups at a computer. Interestingly, the findings were not all favourable towards group learning. Clearly this has implications for those designing computer mediated learning for distance education students.

## **Korea**

The Korea Air and Correspondence University (KACU) was established in 1972 first as a branch school of Seoul National University, offering 2-year junior college courses in five departments. Nine years later, in 1981, it had grown to a 5-year university, offering degree course programmes leading to BA and BSc. The following year, in 1982, saw it elevated to the status of an independent national university with 9 departments. Ten years later, in 1992, the University's total instruction system has been transferred to a 4-year degree course programme in 17 major fields. In 1994, the University changed its name to Korea National Open University.

An Institute of Distance Education was established in the university in 1977. Its research and development functions include:

- To lead the development of distance and life-long learning in the university
- To improve the learning environment to enhance learning
- To plan, evaluate and improve the media used in distance learning

- To experiment the use of new media in its distance learning courses.

### ***Malaysia***

The institution producing the most research in open learning in Malaysia is the Universiti Sains Malaysia, which established its Off-Campus Education Programme in 1971. With enrolments around 3,000, it is the only public programme in Malaysia offering degree through distance education.

Staff from the Programme have contributed to Asian research in openlearning through articles and papers in journals and at conferences. For example, they have regularly supported the Research in Distance Education (RIDE) conferences at Deakin University in Australia.

### ***Sri Lanka***

The Open University of Sri Lanka (OUSL), established in 1980 at Nawala in Colombo, has about 20,000 students with an annual intake of 1,800. OUSL has a number of research strands carried out by staff of the Faculty of Humanities and Social Sciences and the Educational Technology Division, as well as an ongoing ODA (UK) guided project. The ODA project includes survey research on course quality, student satisfaction, graduates and employers. Programme effectiveness is also under study, from foundation level programmes through to a Postgraduate Diploma in Management.

Projects in the Faculty of Humanities and Social Sciences include investigations of student performance in a number of programmes, a private sector needs assessment survey and a study on the participation of employed women in university education.

The Educational Technology Division is engaged in research on student learning environments, student profile, analysis of performance and survey on willingness to learn from media.

Other individual research projects include:

- Student Perceptions of Delivery Modes in Distance Teacher Education
- Quality Issues in Reaching out to Student Teachers Learning at a Distance
- Reaching out to Disadvantaged Lower Primary Children through Distance Education

## **Taiwan**

The National Open University (NOU) is the only government-funded dedicated distance learning tertiary institution in Taiwan, Republic of China. Its Department of Research and Development carries out research in distance teaching and learning, production of television programmes, and development of learning resources. In 1992, the Department strengthened its functions by establishing two sections, one responsible for research and evaluation of teaching, teaching materials, media, curriculum, qualifications of academic staff, learning outcomes, television programmes etc., and the other for the strategic planning of teaching, teaching materials, media, assessment, curriculum, programmes production and the exchange of academic staff. The Department is well staffed, with a Director, four full-time researchers, two temporary researchers and a short term student researcher.

Since its establishment, the Department has completed 29 research projects (with two in progress), on issues related to distance education and education policy. It has held seven international conferences, including the Adult Education Conference for the Two Sides of the Taiwan Strait, and the Ninth Annual Conference of the Asian Association of Open Universities.

Research projects undertaken by the Department include:

- television programmes viewing rate (three projects),
- selection of subjects of study (two projects),
- student attrition,
- face-to-face component in distance education,
- aims of education and their relations to curriculum design,
- selection of teaching media,
- quantitative assessment of students' performance,
- evaluation of the course review system,
- the use of direct broadcast satellite,
- public television, and cable television in distance education,
- curriculum/course design,
- assessment of course implementation and improvement in the teaching process,
- course materials and their usage,
- exchange of courses with other universities,
- evaluation of experimental courses,
- formative evaluation in course development,
- needs assessment of distance education in Taiwan and Fujian area,
- integration of multimedia in teaching, and
- self evaluation and employment situations of graduates.

Two projects in progress cover the area of intent of participation in tertiary distance education, and a feasibility study in the presentation

of science and engineering courses by distance education. All reports of the studies are in the Chinese language, but a number of the reports have English translations.

Other academic departments of the NOU, to a lesser extent, also engage in research in distance education. Areas of investigation include: curriculum design, models of course materials development, education need by metropolitan people in Taiwan, feasibility of a multimedia teaching room, and evaluation of the computer learning environment at the NOU.

The Department of Research is now planning research in the areas of cross-cultural studies on the need for distance education in Taiwan, Hong Kong and mainland China, forming an adult learning system using multimedia and the computer network, student study styles, and a feasibility study on various type of courses and programmes (short and extension courses, graduate courses, and modular courses).

### ***Thailand***

Established as a single mode distance education university in 1978, Sukhothai Thammathirat Open University (STOU) is Thailand's major open learning institution. With an estimated annual intake of 80,000 to 90,000 students, total student enrolment reaches approximately 250,000 students.

Currently, as well as individual research, STOU has 16 research projects in progress or reaching completion, including:

- Development of the Distance Education Thesaurus
- A Feasibility Study of Using Tele-Communications for Developing Interactive Distance Education System at Sukhothai Thammathirat Open University
- A Feasibility Study of the Introduction of the Satellite Communication System in STOU's distance Education System
- A Cost-Benefit Analysis of STOU Distance Education System
- STOU's Tutorial Methods
- A Study of STOU Students' Use of Main and Supplementary Media

### ***Vietnam***

Open learning has existed in Vietnam since the 1960s, and was given impetus in 1988 with the establishment of the Vietnam National Institute of Open Learning. Most recently, Vietnam has established the Hanoi National Open University (HNOU), which is associated

with the Hanoi University of Technology. This association means, for example, that the HNOU can draw on the strengths and expertise of the HUT, especially in the area of information technology. Papers have already been presented at regional conferences concerning open learning in Vietnam (Thai, 1995, 1996a, b), and research is underway within the HNOU that will inform and assist in the growth and development of the university.

## **5. Conclusion**

Just as the Asian Tigers have emerged from the economic powerhouse of the Asian region, so too a collection of Open Learning Tigers are appearing. These institutions, especially the mega-universities, will continue to grow and influence the practice of open learning world wide. In particular, emerging patterns of research in the region will inform and affect practice at all levels. Clearly, much of current research is institutional, but the growing realisation (AAOU, 1995a) of the benefits of co-operation and co-ordinated action will mean that wider research and development efforts will be required. There are clear indications within Asia that its open learning institutions are taking research seriously, which augurs well for the future.

## **6.0 Bibliography**

- AAOU (1991) Face-to-face components in distance education. Conference proceedings of the Asian Association of Open Universities IVth Annual Conference, Open University of Sri Lanka, Sri Lanka, 402pp.
- AAOU (1992) The role of open universities in promoting education for all. Conference proceedings of the Asian Association of Open Universities Vth Annual Conference, Korea Air and Correspondence University, Korea, 427pp.
- AAOU (1995a) Structure and management of open learning systems. Conference proceedings of the Asian Association of Open Universities VIIIth Annual Conference, Indira Gandhi National Open University, India in 3 volumes vol.1: 385p.; vol.2: 369p.; vol.3: 173p.
- AAOU (1995b) Globalized and cooperative distance learning. Conference proceedings of the Asian Association of Open Universities IXth Annual Conference, Taiwan National Open University, Taiwan, 660 pp.

- Daniel, J. (1995) 'Open Universities and the Knowledge Media: New Opportunities, New Threats', in AAOU, (1995) Globalized and cooperative distance learning. Conference proceedings of the Asian Association of Open Universities IXth Annual Conference, Taiwan National Open University, Taiwan.
- Ide, S. (1996) An Essay on Visualisation "Broadcast and Education" II: New Concept of Learning Using Special Characteristics of Print and Television, Bulletin of the National Institute of Multimedia Education, No. 13, pp. 119-129. (in Japanese)
- Kato, H. (1995) Technology and distance education. Indian Journal of Open Learning, 4, 1, pp.11-14.
- Kawashima, J. (1994) The Potential of Satellite-Based Interactive Television Systems for Distance Higher Education, Bulletin of the National Institute of Multimedia Education, No. 11, pp. 1-14. (in Japanese)
- Kuzuoka, H., Ishimoda, G., Nishimura, Y., Kondo, K. & Suzuki, R. (1995) GestureCam System: Camera Robot Mediated Remote Education, Bulletin of the National Institute of Multimedia Education, No. 12, pp. 165-173. (in Japanese)
- Lee, V., Murphy, D., Chan, C.C. and Chung, L. (in press) Computer-aided distance learning: a case study. Open Learning.
- Miyashiro, S., Wakamatsu, S., Yanagimachi, A., Namba, S., Arger, G., Sunaga, K. & Suzuki, T. (1995) Application of Multi-Program TV System for Educational Broadcasting, Bulletin of the National Institute of Multimedia Education, No. 12, pp. 1-20. (in Japanese)
- Ohnishi, H. (1995) Reasoning with Diagrammatic Information, Bulletin of the National Institute of Multimedia Education, No. 12, pp. 115-129. (in Japanese)
- Pandit, P.V. (1994) A vision for higher education through distance education. Kakatiya Journal of Distance Education, 3, 2, pp.77-96.
- Rathore, H.C.S. (1995) Personal Contact Programmes of correspondence institutes in India: an evaluation. Indian Journal of Open Learning, 4, 1, pp.15-21.
- Sharma, Y. (1994) Accommodating social demand for higher education and the cost effectiveness of open universities: a

- case study. *Kakatiya Journal of Distance Education*, 3, 2, pp.97-114.
- Sinha, N. (1995) Student support services: a perspective from the National Open School. *Indian Journal of Open Learning*, 4, 1, pp.22-25.
- Thai, T.S. (1995) Distance Education in Vietnam and the Role of Information Technology. Keynote Address at the 1st International Conference: Intercultural - Interaction & Development, Hanoi, September.
- Thai, T.S. (1996a) Distance Education and Open Learning in Vietnam: A New Aspect of the Development of Vocational and Higher Education. Paper presented at the International Conference on Reinventing Higher Education, Bangkok, July.
- Thai, T.S. (1996b) Computer Aided Learning: Interactives in the Learning Process and Information Technology Support for Self-taught Learners. Paper to be presented at the International Conference on Autonomy 2000, Bangkok, November.
- Wakamatsu, S., Sekiguchi, O., Wakamatsu, N., Nagayama, Y. & Arakawa, S. (1995) Experiment on a System of Lifelong Learning at a Rural District Using Interactive Video via ISDN, *Bulletin of the National Institute of Multimedia Education*, No. 12, pp. 151-164. (in Japanese)
- Wei, R. & Tong, Y. (1994) *Radio and TV Universities: The Mainstream of China's Adult and Distance Higher Education*, Nanjing, Yilin Press.
- Yamaji, H., Otsuka, Y., Ikeda, H., Bailey, J.H., Bailey, C., Osakabe, M. & Plath, D.W. (1994) An Evaluative Survey of Cross-Cultural Learning through Video Materials, *Bulletin of the National Institute of Multimedia Education*, No. 11, pp. 173-188.
- Yoshida, M. (1996) The Effects of Group Accelerated Learning in a Computer Training Course for Lifelong Education, *Bulletin of the National Institute of Multimedia Education*, No. 13, pp. 209-223.