Building collaborative ODL research: the PANdora projects

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Abstract

From 2005-2008, the International Development Research Centre (IDRC) is funding a series of open and distance learning (ODL) studies in Asia through its *Pan Asia Networking* programme initiative. Nine collaborative projects are underway in 11 countries, in an initiative designed to generate shared access to Asian ODL methods and resources. The projects emphasise the technologies appropriate to Asian distance education, and cover a wide range of practical and policy topics, including the use of open-source software, mobile technologies, learning object repositories, and online assessment methods. The PAN projects' networking approach is designed to build on the strengths of individual Asian research teams, and to avoid overlap and duplication between projects and nations.

Introduction

Pandora's Box is an apt metaphor for online education. In Greek legend, the box was a mixed bag of problems accompanied by hope. Today's online education is a similar ragbag of methods and tools, some well conceived, but others creating more problems than they solve. In different parts of the world, for example, online ODL technologies are emerging with little or no apparent respect for the accessibility problems they create, and are leading to less efficient educational delivery than was possible with traditional media and with earlier online methods. Meanwhile, in specific regions, different technological emphases have emerged to the exclusion of others. North American ODL institutions, for example, tend not to exploit the Internet's vast potential for synchronous interaction, in view of the time-zone difference between online students and faculty; while other nations (e.g. Japan) have emphasized live, satellite-based broadcast methods of education to a greater extent than online methods. Meanwhile, nations with widespread Internet connectivity tend not to be using it for educational purposes at all. The South Pacific island of Niue, for instance, is the only nation in the world with free Internet service yet with little educational usage of it (Veramu, 2005, personal communication).

Comparative research and evaluation efforts are essential to adjust these disparities, and to identify the most effective policies and practices for ODL technology usage. Yet research into online methodology tends to be conceived within finite geographical boundaries, and to lead to widespread duplication of effort between institutions and nations. In an attempt to overcome these problems, the IDRC has funded a series of complementary ODL projects involving close collaboration between R&D teams in 11 Asian countries: Cambodia, Hong Kong, India, Indonesia, Laos, Mongolia, Pakistan, the Philippines, Sri Lanka, Thailand, and Vietnam. The initiative will run from 2005-2008, and has been named 'PANdora', representing 'Pan Asia Networking Distance and Open Resource Access'. The PANdora network is administered by the Virtual University of Pakistan and Universitas Terbuka, Indonesia, and is funded by IDRC through its Regional Office in Singapore.

The IDRC has funded numerous DL technology projects in the past, each containing many elements. For example, a PAN Asia project nearing completion at the National Institute of Education, Bhutan, is developing a wide range of ODL provisions and skills, including traditional and online course materials, training and evaluation methods, and the development of key performance indicators. The PANdora initiative takes a different approach, whereby simultaneous projects examine specific issues, and minimal overlap occurs between the projects (Baggaley & Ng, 2005). The nine projects are thereby complementary in scope, and, it is hoped, will lead to the development of a ODL approach appropriate to South and SE Asia in general. A comprehensive framework for the initiative is given by Malik, Belawati & Baggaley (2005). The IDRC created its PANdora initiative following a 2004 overview tour of the 11 countries by the first author of the ODLAA paper, whose presentation at the Conference will discuss the initiative's collaborative research approach and potential.

The PANdora Projects (2005-08)

Project #1 (**India, Pakistan Sri Lanka):**
Accessibility, Acceptance, and Effects of DL Technologies in South Asia:

This project investigates different Information and Communications Technology (ICT)-based learning models (independent and blended), in terms of access, acceptability, impact on learning and cost effectiveness, and learning styles. It will have implications for future DL initiatives in Asia and in other countries where the benefits of DL have not yet become generally known. Expected outputs include

research publications on access to ICT-based independent and blended learning technologies in the three countries; and recommendations on suitable ICT based learning models and best practices for the three countries and others in the region.

Project #2 (**Mongolia, Philippines):**
The Viability of Mobile SMS Technologies for Non-formal DL in Asia

The feasibility and acceptability of using short message system (SMS) technologies are being investigated for non-formal DL delivery to different socio-economic, cultural and gender groups. Expected outputs include courseware in SMS and other formats (booklets, cassettes, CD-ROMs, online); an SMS server in the two countries to handle student registration, storage, and deployment of the educational materials; trained personnel on SMS-enabled technologies; research tools/ methodologies for use by project partners; publications; and a set of suggestions for policy guidelines and standards for the use of SMS in DL.

Project #3 (Indonesia, Mongolia, Sri Lanka, Vietnam):
Evaluation and adaptation of Open Source Software for DL in Asia

The project is evaluating existing DL software, both commercial and open source software (OSS), in order to identify software that can be customized to the needs of specific educational institutions. The expected outputs include an OS DL software to be disseminated under the GNU/ GPL license through the PAN/ ASEAN Foundation's Collaboratory server in Jakarta; mirror sites across the PANdora network; and a set of technical and user manuals for future customization of the OSS. The project aims to enable a consistent course management approach across the region.

Project #4 (India, Mongolia, Philippines):
A Platform for Virtual Research and Research Training in Asia

This project is complementary to the previous project, and is developing an online research platform for Asian DL researchers, containing training resources in selected areas of DL research, links to research repositories and information networks containing data on research experts, advice by active specialists, policy guidelines for institutional research, and benchmarks and standards for collaborative virtual research and research training. The project will have implications for the development and administration of effective online research methods, currently a significant issue in the evolution of online graduate research approaches.

Project #5 (India, Philippines):
Instructional Design Training for ICT-based DL in Asia

This project will take stock of the instructional design approaches used in DL internationally, and will examine the extent to which they are appropriate in Asian DL. It aims to develop appropriate design approaches, prototypes, training resources, and blended training strategies for instructional design across domain/discipline areas and levels, and various media. It will pay specific attention to gender, age, and cultural factors in instructional design, and will make culture-specific recommendations for PAN projects in other parts of the region.

Project #6 (Cambodia, Hong Kong, Indonesia, Pakistan, Thailand):
A Repository of Reusable Learning Objects for DL in Asia

The aims of this project are to enhance collaboration and course materials sharing between the project partners, to evaluate the effectiveness of sharable learning object materials (LOM) in content development, and to avoid duplication and deviation from internationally recognized standards. Expected outputs include a list of criteria/ definitions of LOMs, a sharable LOM repository, a working granularity scheme for using LOMs collaboratively, prototypes of reusable LOMs for flexible, extensible use in curriculum development among the partners, and an evaluation report of the usability of LOMs by partner institutions.

Project #7 (Indonesia, Pakistan, Sri Lanka):
E-assessment Methods and Models for Student Evaluation in Asia

The project is examining existing policies, practices, and methods of e-assessment in relation to institutional, technological, operational, and human issues (including gender differences). A generalized e-assessment model will be developed, and its applicability and acceptability tested in the partner institutions. The model, training materials, and instructional design prototypes will be gender- and culture-sensitive for Asian students and faculty. Future applications of the model will be recommended. The project will place special emphasis on increasing problems of e-assessment relating to online security.

Project #8 (Cambodia, Lao PDR, Vietnam):
Best Practices in DL Technology for Capacity Building

The objectives of this project are to: (1) survey and take stock of the existing educational scenarios and problems in the three countries; (2) initiate strategies for networking collaboration with other DL institutions in the region; (3) record the best practices of DL policy, research, and practices in other Asian countries; (4) discuss these documents with the core groups, policy- and decision-makers in those

countries; (5) build further capacity through a training-of-trainers programs in those countries; and (6) formulate recommendations for further development of detailed DL initiatives.

Project #9 (Hong Kong, Mongolia Vietnam):
Evaluation of DL Practices for Policy Recommendations

National recognition of DL is currently low in Mongolia and Vietnam, and the project partners from these two countries are developing detailed social programmes to address the problem. Advised by the Open University of Hong Kong, the project will examine the factors affecting DL adoption, via consultations with a comprehensive range of social groups and policy-makers. The project will provide an important under-pinning for the work of the PAN network as a whole, and will combine with the previous project in increasing social acceptance and implementation of DL, and cross-cultural variations of it.

Project Partner Institutions

The nine PANdora projects are conducted in teams combining three or more of the following institutions:

- Allama Iqbal Open University, Pakistan
- ASEAN Foundation, Jakarta, Indonesia
- ESP Foundation, Ulaanbaatar
- Fisheries College #4, Bac Ninh, Vietnam
- Health Sciences University of Mongolia, Ulaanbaatar
- Ho Chi Minh City Open University, Vietnam
- Indira Gandhi National Open University, India
- InfoCon Ltd., Ulaanbaatar, Mongolia
- Institute of Information Technology, Vietnam
- Institute of Technology, Cambodia
- International Institute of Cambodia
- Ministry of Education, Youth and Sports, Cambodia
- Ministry of Post and Telecommunications, Cambodia
- Molave Development Foundation, Philippines
- National Business Institute, Cambodia
- National ICT for Development Authority, Cambodia
- National Science Council, Laos
- Open University of Hong Kong
- Science Technology and Environment Agency (STEA), Laos
- Sukothai Thammathirat Open University, Thailand
- University of Colombo School of Computing, Sri Lanka
- University of the Philippines Open University
- Universitas Terbuka, Indonesia
- Vigyan Prasar, Department of Science & Technology, India

The PANdora Web site

Collaboration between the institutions conducting each project, and between projects, is facilitated by the initiative's interactive web site at http://www.pandora-asia.org/. The site includes audio-conferencing

software for international seminars and discussions among the project teams, project-planning and file-sharing software, trial versions of course management software, and copies of project reports, publications, conference presentations, and evaluation tools. Emphasis is placed on open source and freeware approaches. A 'blog' facility allows rapid communication of project announcements.

Conclusions

It is to be hoped that the PANdora initiative will ultimately succeed in generating a common model for Asian online education. Of course, the obstacles to this goal are clear. Cultural and technical issues may prevent the benefits of individual projects from being successfully shared across the region, and specific projects may generate conclusions of value to isolated project teams only. However, the alternative would be to assume that the ODL needs and situations of different Asian nations are different whereas in fact they may not be, and to allocate funding to overlapping and even identical projects conducted separately in different institutions. Research and development conducted via this approach would lead to constant ODL "reinventions of the wheel" rather than to the dissolution of borders that have no bearing on educational issues. In a sense, the IDRC's PANdora initiative is taking the Internet at its word, as a massive facility for effective sharing of needs and coordination of effort. PANdora's nine complementary projects are creating a means for research teams in different nations to use the online media as a means to develop online methods of relevance to them all. In concentrating on specific ODL issues, and in ultimately combining the conclusions within a flexible transnational system, this collaborative initiative may have widespread implications for ODL methods internationally. Pursuing the metaphor of 'Pandora's box' to another level, the collaborative research process is seen as one in which numerous problems are revealed in the attempt to find the hope that lies beneath them.

References

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