Reflections on the State of the Art of Research in Open and Distance Education in Asia

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ABSTRACT :

In this paper, I reflect on research in open learning and distance education in Asia, and the symbiotic relationship between theory and research. While research informs theory and is informed by it, there are some very practical considerations related to research. First among these is any research that is undertaken must not only be based on theory but also have some implication for theory, and second, theory must have pragmatic validity. In my view, research that has no usefulness in practice is often wasteful in money and human resource efforts – and this too often appears to be the case in Asia. This paper looks at the similarities and differences between conventional and distance education to suggest where pragmatic and reliable research in Asia should be directed. One area for research is in the pragmatic ethnographic mapping of the learner ; another pragmatic content ; and the delivery system – which technologies should be used and why ; and also another area for pragmatic research is into the learner support systems for open and distance learning in Asia – all these are in need of critical input in Asia.

1. INTRODUCTION :

Riding the crest of the wave of the convergence of education and information technology, open and distance learning is on the move. Enrollments are soaring as the conventional education system fails to meet demand; lifelong learning has a new meaning, whether for basic education or professional enhancement of skills. There are few areas into which open and distance learning has not ventured; and there are few governments whose policies do not promote a proactive role for this mode of learning.

Yet, educators and administrators in the two systems are unable to bridge what seems to be an intellectual gap between the two. Despite convergence of technologies and the explosive growth of dual mode systems of education throughout the world and particularly in Asia, managers of conventional systems see open and distance learning as a revenue generating opportunity. In single mode open learning systems, managers are still concerned about the gap between promise and performance and about equivalence with the conventional system.

As a teacher, researcher, and practitioner, I have come across situations familiar to those engaged in each of the roles. As a teacher, I have grappled with the use of teaching aids to enhance the quality of classroom instruction; as a researcher, I have worried endlessly about the dismal findings from field data; as a practitioner, I have

personally experienced the gap between teachers and technology. And it is from these experiences, that I draw the source materials for this reflective paper on research issues in open and distance learning in Asia.

Not a single year goes by when, somewhere in Asia, there has not been a workshop, a seminar, or an article published on the state of open and distance learning. In some instances, what are reported are case studies; in other instances, results of some brief research effort; or there are articles thatspeak of the potentials of open and distance learning and bemoan that the conventional system does not accept the equivalency of this form of education. Each year sees a demand for the rejection of external models, for the development of location and culture specific materials to cater to unique needs, and for research into the various technologies used by this form of education. In the meantime, the methodologies for delivery of learning are growing at an exponential rate bringing with them new pedagogies for teaching and learning. And both researchers and practitioners of open and distance learning in parts of Asia seem to be caught in a time warp, raising issues and questions seemingly well past their time and space in global debates in education.

2. RESEARCH IN PERSPECTIVE :

To place matters within a perspective, it is necessary that we recognize that we are no longer dealing with a single discipline. We are in a field of interest or enquiry, one that can be studied from several disciplinary positions; from perspectives of academic disciplines such as political science, engineering, or psychology, as technologists or instructional designers, or even as educational administrators. This multi-disciplinary condition, while appropriate to the subject matter, also tends to an apparent confusion and lack of cohesion.

There is also a symbiotic relationship between theory and research; each is part of the process as also the result of the other. On the one hand, research is a critical input into the development, design, production, delivery and evaluation of courses and content; while on the other hand, findings from research must feed into the theory of this multidisciplinary and even epistemological enquiry. The perspective must then become total and each element must be examined in association with each other, rather than in isolation at each stage of the processes.

If there is a single premise to this paper, it is this symbiotic relationship. If research has no implication for theory, if it lacks even a minimum of **scientific method** and explanatory power, it should not be undertaken. At the same time, if research in the context of national social and economic development cannot provide a clear, direct, and unambiguous line between results and decision alternatives, it lacks **pragmatic validity** and similarly should not be undertaken. In a developing country, the ultimate test of the value of research is a pragmatic one, its usefulness in practice. By this test, much of the research done in the 'name' of development has been a waste.

This symbiotic relationship between theory and research, and the fact that much of the research conducted in academia is esoteric, is what makes policy makers reach for their guns, fearing an escape by researchers into the 'ivory tower' of abstract reasoning. Admittedly, experience at the hands of those researchers who tend to equate obscurantism with erudition may well account for this tendency.

Closely related to the above is the tendency to look for unilinear, causal relationships where none exist. The nature of any learning relationship, rooted as it is within a social context defies any unilinear understanding. One can no longer conduct a pre and post-test and automatically conclude that the positive result is necessarily a result of exposure to the intervention. This becomes unbalanced, especially, if we place our intervention at the centre stage instead of as a part of the larger social milieu.

The table below summarizes the clear distinction between pure research and applied research, especially as it impacts upon research in open and distance learning systems.

Table 1 : Distinctions between Pure and Applied Research (Berelson, 1966)

Characteristics of Pure Research	Characteristics of Applied Research
Aims to contribute to theory and techniques of the discipline	Aims to solve or ameliorate a problem
Study a problem	Studies problems with important social consequences
Studies a problem usually from the focus of one discipline	Often several disciplines collaborate for solving the problem
Restricts research	Often is involved in action or administration, not only in research
Requires mainly technical judgement	Requires, also, a sense of what the situation and personalities can bear
Seeks generalizations	Often studies individual cases without the objective to generalize
Accepts the hypothesis that variables not measured remain constant	Recognizes that other variables are constantly changing
Looks for 'basic processes'	Looks for any variable which makes the desired difference
Content with small differences, if statistically significant	Interested in important differences
Tries to say why things happen	Tries to say how things can be changed
Attempts to get all the facts	Attempts, only, to collect facts, which speak reasonably directly to practitioners' decisions - to actionable alternatives recognized in advance
Aims at publishing a research report (on an average this can be done in about five years after the completion of the field work)	Aims at bringing about actionable points quickly in a series of memoranda and discussions with practitioners
Reports in the technical language of the discipline	Reports in common language
Gives rewards for theoretical and technical virtuosity	Gives rewards for solving problems
Has as its reference group other behavioural scientists	Has as its reference group practitioners and their clients
See sociology, psychology, etc. as academic disciplines	Sees applied behavioural science as a profession and first allegiance to treatment and making decisions despite uncertainty.

3. RESEARCH IN OPEN AND DISTANCE LEARNING SYSTEMS :

Any open and distance learning system is a complex one. There are a variety of functions and activities to be undertaken, some in a linear, sequential fashion; others require parallel processing.

Open learning systems are similar to conventional systems, yet have a distinct identity. Both systems aims to provide relevance and quality to educational content; but the methodologies are different; both

have administrative systems that enrol and instruct learners but the delivery mechanisms vary; both usually require learners to sit for examinations before receiving certification, although the nature of such certification sometimes contrast.

Yet, there are fundamental differences between the two systems, in learner characteristics and learning styles and especially in the way in which resources have to be made available and deployed. ODL systems must remain open, flexible, innovative and responsive to learner needs. ODL systems deliver courses using a mix of technologies and media. Part-time tutors or counsellors to provide learner support typically support ODL systems. ODL systems frequently require inter-institutional collaboration to develop and deliver courses. ODL systems must have administrative and staffing patterns that accommodate diversity of functions. Thus the components of the two systems are different, even though the goals and objectives may be the same.

Open and distance learning systems are essentially technology-based learning systems and are inherently different from the conventional systems. While their functions of providing education may remain the same, the structural elements are very different. These elements include

The academic : course design, content development, materials development, production, counseling, tutoring, and mentoring of learners, assessment and evaluation

The managerial : This includes promotion, enrolment, registration, learner support, data management, system evaluation and research

The technology : managing the technology in terms of hardware, programming and application software, preparation and packaging of content, delivery technologies, system maintenance, and upgradation of all aspects of the technology. Deployment of technology and maintenance at the learner end can also be part of the technology responsibility

The material development and distribution : production and distribution of technology based materials, especially in a non-broadcast or off-line mode to learners

The administrative : These include processes of recruitment of human resources, financial management and control, and various support services that are necessary for other functions to take place.

Before I address the issue of what I consider to be research questions for open and distance learning systems, let me briefly dwell upon the paradox of open and distance learning.

The implicit assumption in open and distance learning institutions is that they are supposed to broaden and democratize education, by offering and making available opportunities to learners. They are expected to be learner friendly, learner supportive, learner responsive, both in terms of quality and speed of response.

In reality, institutions of open and distance learning are only a degree more open than conventional systems. As organizations established by conventional governments as part of a broad educational agenda, they reflect the 'conventionalism' of existing institutions of learning; they combine hierarchical and bureaucratic systems of administration facing off a collegial culture of academic freedom and innovative possibilities. The bureaucratic model of student admission and evaluation, student services and facilities, library systems, personnel and administration is often in direct contrast to the flexibility and openness that should be the major operational characteristic. For instance, for managerial purposes, student admissions and evaluations form part of an annual academic calendar of activities - this defeats the concepts of learning anytime, anyplace, and at any pace. In academic aspects, course teams give way to the decisions of academic committees - these in turn are subject to administrative and financial rigours of the government, instead of academic audits; imposing rigidities upon an essentially democratically functioning academia.

By examining the goals, structure and functioning of any open and distance learning system, it is possible to arrive at some of the questions that research, *pragmatic and reliable*, can address.

3.1 System Issues :

Research is needed to address system issues in ODL institutions. These issues imply that the skills of policy researchers be brought to bear to determine the consideration of policy such as institutional vision, mission and the balancing of resources allotted for different aspects of distance education. A national policy and the place of distance learning within it; policies related to resource management, regulation, monitoring, and accreditation and quality assurance are all system questions at a macro level that researchers can address.

Translated to the micro level within an institution, policy research is necessary to determine how the system will best function to meet its defined vision. The creation of a learning community within an ODL institution is essential if it is, in turn, to meet its mandate of providing open, flexible learning.

Without losing sight of institutional vision, policy research is needed when an institution has to focus on resource management. An ODL institution has to set up facilitative policies, procedures and mechanisms for rationalizing work between several disparate academic, production, and delivery and learner support units. What kind of knowledge inputs is required to enable the effective governance of an ODL institution?

Knowledge as a resource is *sine qua non* for enlightened decision-making; noticeable currently by its paucity rather than by its abundance. And research is needed to generate this knowledge.

3.2 Mapping the Learner :

ODL systems, by definition and character, address learners separated across time and space, and generally in an asynchronous mode. A social distance between the academic on the campus (who has to develop and produce curriculum and content, and determine the delivery strategy exacerbates this distance of time and space. Very often this task is done, either in a blind, or on the basis of conventional wisdom based on a superficial and sporadic understanding of the learner.

If each learner has different characteristics and learning styles, it can be argued that each academic preparing lessons, blocks and courses also has different styles. The distance between the teacher and learner has to be bridged through instructional design. Effective design requires a *pragmatic ethnographic mapping* of the learner; to answer questions about socio cultural characteristics, learning needs and styles, media exposure and attitudes.

By its very nature, ODL needs to find ways and means of identifying learner needs, learning styles and characteristics by a process in which the identification of the target groups is undertaken. This is the first task at hand. Without a proper identification of the target groups, it is impossible to plan and develop other elements of the process. Questions that decision makers ask and researchers have to answer include

a. What is the target population?
b. Why this population?
c. How will you identify the demographics of your target population?
d. How will you identify the motivations of your target population?
e. How will you identify their study skills and learning styles?
f. How will you determine the prior learning levels of your target population?
g. What is the extent and range of access to technology that the learners will readily have?
h. What are the implications of the demographic, motivational and learning factors that you have found for what you plan?
i. How will you make sure that the students whom you enroll have the prior learning skills?

3.3 Mapping the Content of ODL :

The content of ODL consists of the course design, content development, materials development, production, counseling, tutoring, and mentoring of learners, assessment and evaluation.

Much of the content of ODL systems in Asia were derived from the model and barring in a few countries, there is little research evidence to indicate whether we

have met with satisfactory results.

We need to know not only to know the curriculum needs of the target as identified by experts in the field, but also to determine if such identified needs meet target learners' life experience. Adult learners, in particular, have different learning styles from children, the same holds true for different types of learners. It is necessary to match the curriculum needs as closely to the target learners, so that learning can be optimized.

We also need market research to simply 'find out what people want' and what is already available. Some of the questions that need to be answered will impact on the success or failure include

How many potential students are there? Is it a captive market or are the potential students as diffuse and nebulous as consumers of other products?

What is the competition? What other courses are available and at what cost?

What will be unique about our course or programme? What will be its USP?

Will students be willing to pay? If so, how much can they afford to pay?

Essentially, research is needed for informed decision making on ways and means of preparing and producing instructional materials that will meet such needs and stated objectives and will match the content to the learner rather than expecting the learner to 'fit in'.

3.4 Mapping the Delivery System

In a conventional system, interaction between the teacher and student and between the institution and the student is done on a face-to-face basis. When technology forms the primary means of mediating this relationship, it is even more important that we understand critical issues of access, availability, and interactivity and base media choices on research findings on media reach, access, and availability. Large scale surveys and sharp focused case studies to study media potential and problems are essential. Research is also essential to understand the nature of learning from the media and to distinguish between the content of learning and the format of delivery. Old models of media omnipotence are no longer valid as bases for decision making; yet, there is little critical knowledge about the new media and the pedagogy of learning from new media.

Some research questions that can be addressed in order to map a delivery mechanism include

What are the media technologies useful for education and what are the conditions of their effectiveness?

What indicators or pointers can be provided before decisions regarding the use of media are made, whether at planning, implementation, or evaluation stage?

What is the relative cost effectiveness of delivery mechanisms in global, national, and/or local settings?

How, in relation to the media, does one judge, for instance the instructional design, format of production, and delivery mechanism?

What, if any, are the implications and conditions of applicability of transnational media products? What is the relevance in terms of utility, cultural and linguistic appropriateness? (This question has special reference when decisions are taken to adopt, adapt, repurpose, and repackage learning content for different settings.)

3.5 Mapping the Learner Support Systems

The learner, in an ODL system needs more support than in a conventional face-to-face situation. Yet, there is little information about whether the learners find the support they need, whether it is for counseling, for mentoring, or tutoring. Effective learner support systems at the institutional and in the field are critical. An institution has to plan for providing effective learner support. To put it simply, in a technology mediated system, if a student does not get a reply to an email query within 48 hours, he or she will feel isolated and neglected and consequently lose the motivation to learn. Research questions that can be addressed include

Can we establish that the low completion rates in ODL institutions are merely a result of poor learner motivation?

Or are there systemic faults in the learner support systems? Can we know for sure?

Without a proper evaluation of the

existing learner support mechanism in an ODL institution, it is impossible to have a clear plan even for developing a plan to determine if such learner support will be provided by in-house academics, part-time counselors or tutors, or by an agency franchised for the purpose.

4. CONCLUSION :

One cannot underestimate the importance of constant system monitoring and evaluation. This is a process that has to be planned for and built in right from the start to enable proper planning, mid-course correction, and summative evaluation to determine whether we have succeeded or failed, and the reasons for the same. Delivering education through technology-mediated ODL systems is an expensive process, and management decisions will be based on levels of success and failure.

Such monitoring and evaluation can be of a quantitative and qualitative nature. Quantitative data enable us to get the broad picture of what has occurred; qualitative data enable valuable insights. Such data and insights are valuable as feed-forward information, enabling effective planning and implementation.

The research agenda for open and distance learning is extensive, more so in Asia, where little critical input exists. It is for readers of this paper to ponder over some of the issues raised here.

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