

## Distance Education During the 90's : An Annotated Bibliography

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The developing countries, including India are at a disadvantage in acquiring or generating sufficient new literature on various aspects of Distance Education and its current practices. Distance Teachers as well as their students in these countries have to wait at least for a few years to actually get hold of the books, research reports and other documents relevant to their current concerns or their professions. Since the growth of knowledge and information about distance education is still at rudimentary levels in the developing countries, their dependence on the advanced countries in augmenting their own resource base will continue for quite some time. In the process of developing indigenous knowledge base, distance educators in the developing world cannot neglect the need to know what is happening in the field in the advanced parts of the world.

In order to keep informed about the developments in distance education, one has to have access to the literature. In the absence of immediate access, alternatives have to be found to minimise the time lag in getting the information. Annotated bibliographies, Reviews, Excerpts, etc., of recently published books and writeups may be treated as some of the alternatives to disseminate information on the subject. We believe that Vatsala Jambunathan's annotated bibliography would be useful in this respect.

### INTRODUCTION

The concept of distance education is to expand the definitions of how students learn, where they learn, and who teaches them. Recently, there have been increasing number of distance education opportunities offered to a large number of adults and employed personnel. These adults are keen to upgrade their own skills, or acquire another degree or diploma which would enable them to obtain monetary benefits and get promoted to the next level at a faster rate. The trend in the United States is to provide distant learners with live, two-way interactive instruction through the print and non-print media, and the use of latest technology to the benefit of the learners. Needless to say, that quality of distance education is dependent on interaction and participation of learners.

The success of distance education programmes in the developed countries seems to be going at a steady pace, when compared to the adjoining regions of Asia/Pacific and Africa. These regions are progressing at a slower pace, the reason being, the lack of appropriate data bases for the learners. This could be one of the reasons for their slow progress, besides the paucity of much needed help from the resource centers and the regional centers. Lack of access to information and knowledge about the latest concerns is a serious gap.

### STATEMENT OF PURPOSE

While advances in technology make it possible for the DE institution to provide and improve the learning experiences of the distant learner, the use of technology creates access to the issues and concerns voiced by academicians and experts in the field of distance education. This annotated bibliography includes references from journal articles and conference reports covering the period

1990 to 1994. The following research questions guided the preparation of this bibliography.

1. What are the advantages and disadvantages of such a bibliography for the developing countries?
2. How cost effective is this means of conveying the abstracts to the centers?
3. Has anyone attempted the compiling of such an updated bibliography?

Six broad subject areas under **distance education** were identified:

- Curriculum Planning
- Recent Trends
- Organisation and Institutional Management
- Communication Technology and Progress
- Learner Concerns/Students' Attitudes
- Evaluation Techniques.

### CURRICULUM PLANNING

1. Martin, Barbara L. Sing. "Distance Education to Teach Instructional Design to Pre-Service Teachers." *Educational Technology*, V 34, P 49 - 55, March, 1994.

This study discusses the impact of each of the following major characteristics of Instructional Design (ID). The author has made an attempt to compare the factors required for designing a course unit keeping in mind the requirements for designing the Instructional Systems Design (ISD). An attempt has been made to group the educational characteristics into three main categories from among the 16 heuristics of instructional design, applicable to all types of distance education courses.

2. Anderson, Paul S. "Distance Education for Teaching Map Use Skills: An Introduction". Paper Presented at the Annual Meeting of North American Cartographic Information Society, Nov 10-13, 1993.

The aim of this paper is to show the relevance of distance education for teaching map use skills. A proposed distance education course on map use which is designed primarily for American inservice social studies teachers is described in this paper. It can be modified to suit a distant learner, by preparing a suitable course outline and design. Geographic scope and operational issues are also discussed in this paper.

### RECENT RESEARCH TRENDS

1. Gibson, Chere Campbell. "Distance Education: On Focus and the Future." *Adult Education Quarterly*, vol. 43, no.3, Spring 1992, pp167-179.

The purpose of this study conducted by the author was to focus on the four main themes of distance education. The four themes were to highlight

- i) the future of distance education as discussed by eminent educationists,
- ii) some contemporary issues discussed during a Symposium held at Pennsylvania State University,
- iii) the foundations of effective practice and
- iv) the suggestions for a future frame work on distance education

From these reviews it is to be seen that distance education is playing an important role in providing equity of access to quality education.

2. Suen, Hoi K. and Stevens, Robert. J. "Analytic Consideration in Distance Education Research" *The American Journal of Distance Education*, vol 7, no 3, 1993.

The article focuses on evaluation methodology and the appropriateness of any analytic procedure that is used during the review of a journal article. The author has reviewed a number of empirical research reports that were submitted for appraisal and has identified a few common analytic problems and errors often overlooked by distance education researchers, regardless of the instructional technology involved. The items include the following.

- Significance Testing and Review of Statistical Data,
- Reporting Practices, and
- Conclusions and findings

Only sound practices and clear communication between the researcher and the learner will help to achieve this goal.

3. Moore, Michael G. "Free Trade in Higher Education". *The American Journal of Distance Education*, vol. 7, no 3, 1993.

This study is an update of the impressions made by the author when he attended a symposium on "Higher Education and Strategic Planning". This document is also referred to as the "Vancouver Communique." The aim of this symposium was to establish a North American Free Trade Area (NAFTA). The document highlights the growth of

distance education as being inevitable and the need of the hour being the formation of an International Forum, in order to perceive a more suitable project according to the resources available in the developing countries. Salient features discussed at the symposium were :

- To establish a Net work on distance education research NADERRN: a consortium to facilitate access to information and support educational research among participating institutions
  - To establish an electronic information base in each of these regions with easy access by the academic community, business community and government foundations. Canada, Mexico and the US along with other regions of the world are on the threshold of a new century, a century in which higher education, research and training, and cooperation will be the main theme for innovation and human resource development. Another feature will be the emergence of an International Virtual Class Room, to be achieved in higher education throughout the world.
4. Meachem, David, Zubair, Afa Shafeca "Models of Distance Education for Developing Island States". Paper presented at the World Conference of the International Council for Distance Education Bangkok, Thailand, Nov 8-13 1992.

This paper contains the proceedings of the International Conference on Distance Education, held at Bangkok, Thailand. The conference participants primarily discussed matters related to the development and advancement of distance education and deliberated on the development of a successful model for developing countries. A model was highlighted that can be built upon the historical and cultural context and one that can survive in an environment of limited resources, geography and infrastructure, the technological environment, and political dimensions at all levels. The author opines that this model may be suitable to small islands like the **Solomon islands and the Maldives**. A diagrammatic representation of the model has been tried so as to enable the researcher to get a holistic view of the situation.

5. Woodley, Alan. "Improving Distance Education Universities through Institutional Research: A Consideration of the Roles and Functions of the Institutional Researcher". Paper presented at the Anniversary Conference of UNED, March 15-19, 1993.

The article focuses on the issues of Institutional research and the definition of Institutional research (IR). It can be defined as a "systematic investigation designed to improve the efficiency and effectiveness of an institution". It is clear that "institutional research" is actually practiced in a whole range of institutions, by staff in different positions, using a variety of methodologies, pertaining to several issues.

The author has tried to identify where IR has had

an impact and relates this to the roles and functions of the institutional researchers themselves. Several theorists have categorized distance education as an industrial process. It is normally considered that institutional research is not a purely technical matter and needs to be considered as a social process of knowledge construction. In the industrial research process, the main aim is profit maximization.

The academicians who are involved in this type of research will help to channelise the resources for the benefit of the distance learners, rather than instill profit making motives. In such times institutional research can serve as a vehicle of self-defence and/or self-criticism. In the existing educational system, they must "respond" to the needs of policy makers. It is essential that the institutional researchers alert the policy makers and make them realize the developing issues pertaining to distant learners and the institutions they are attached to. For Distance Teaching Universities, there is an interesting quality because they are both universities and industries, and both models of research can be seen as applicable.

6. Rekkadal, Torstein. "Recent Research on Distance Education in Norway". Paper presented at the European Association of Distance Teaching Universities, Conference on Quality, Standards and Research in European Distance Education. March 5-6, 1992.

Research in distance education has a more continuous tradition in Norway than in the other Scandinavian countries. Evaluation studies seem to be a significant part of the research activities in the Nordic countries. The field of distance education has traditionally had a weak position in Norwegian university based research, although much of the literature has been taken from the government documents. This review focuses mainly on distance education research in Norway, though studies conducted in Finland, Denmark and Sweden are briefly mentioned. A project designated as "**Two way Communication**" was initiated in the 80's by the International Council Of Distance Education and carried out by 5 different institutions in 4 countries, based on an earlier Norwegian experiment.

7. Farhad Saba and Rick L. Shearer. "Verifying Key Theoretical Concepts in a Dynamic Model of Distance Education". *The American Journal of Distance Education*. vol. 8 no.1 1994.

The authors have demonstrated through a combined study the need for verifying the conceptual foundations of distance education. The project reported has two main goals,

- i) to empirically verify the concepts of transactional distance, structure, and dialogue, and
- ii) to develop a methodology for achieving the first objective.

They have further attempted to establish their findings by drawing on three different fields: distance education, system dynamics, and discourse analysis.

## ORGANISATION AND INSTITUTIONAL MANAGEMENT

1. Van Schoor, W.A. "Institutional Relevance in Distance Education: The Role of Strategic Planning". Paper presented at the World Conference of the Council for Distance Education Nov 9-13, 1992.

This paper discusses the strategic planning and the expansion of distance education in South Africa as a way to meet the demand for higher education. It focuses on the role of distance education as a likely way to reduce the pressures on the universities, and suggests a six-phase model for such strategic planning.

2. Jegede, Olugbemiro. "Distance Education Research Priorities for Australia: A study of the Opinions of Distance Educators and Practitioners". Paper Presented at the Biennial Forum of the Australian and South Pacific External Studies Association, July 21-23 1993.

A group of randomly selected members of the ICDE, based in Australia were surveyed in order to seek their opinions on distance education research priorities for Australia. A detailed questionnaire was used to gather biographical details about respondents and their opinion regarding the available research information on distance education. The respondents (n=17) had taken distance education courses at some time or the other. Discipline-based context, Cost-benefit analysis, Relationship between open learning and distance education and the Role of distance education in national development were some of the areas on which very little information was available. It was agreed that more research was essential on almost every aspect of distance education. However a few key areas were identified as priority areas: communication technology, student support services, time allocation, funding, evaluation, equity and access. Professional advice also figured as one among the problems needing research.

3. Judy I. Jones, Michael Simonson, Mari Kemis and Chris Sorensen. "Distance Education : Cost Analysis". *Distance Education*.

The purpose of this study was to measure the economic benefits by the distant learner from the amount spent in the areas of higher education. The researchers have worked on the most important aspects of higher learning, namely the costs involved. Owing to high costs, the attrition rates tend to be high. The authors in their combined study have seen the various factors that tend to increase costs and have tried to analyze how it can be made cost effective, both to the learner and the organization.

## COMMUNICATION TECHNOLOGY AND PROGRESS

1. Micheal G. Moore, "Audio Conferencing in Distance Education". *American Journal of Distance Education*, vol. 8, no. 1, 1994.

The aim of this paper is to show the relevance of audio conferencing as a medium for distance teaching, and to envisage the use of telephone to link the distant learners with each other and with an instructor. The author has explained the advantages of audio conferencing as an effective medium for distance learning. Based on the author's personal experience, he deplores that this teaching method has been rated as an undervalued method of communication in distance education. A method that is being used for over two decades in the developed world is yet to make its impact in the newly extended areas of Open Learning.

According to the author, educational audio conferencing is the use of telephone to link distant learners with each other and with an instructor. The author envisages five important advantages of using this method to impart effective two-way interactive communication. These are:

- It is learner centered, leads to active learner participation,
- It is flexible and robust,
- It can be integrated with any other medium,
- It is relatively inexpensive.
- If adopted, it will be result oriented.

However, the author stresses that the success of this media depends on four major factors: dependable technology, trained instructors to facilitate interaction, trained course designers and an effective local support.

2. Conference, Reader. SATURN, Europe's Open Learning Network-A Multimedia Approach for Education and Training: *The Case of European Community (EC) Remote Area, Amsterdam, Netherlands, September 26-27, 1991*. Commission of the European Communities, Brussels, Belgium.

This abstract gives a glimpse of the proceedings of the common concerns in the European Community (EC) regarding the need to stimulate and advance awareness of the multimedia, open education and the training needs on a European scale. The year 1992 seems to constitute a turning point in the future of the countries that make up the European Community.

The highlight of the session was the use of multimedia for learning which would dynamically enrich education units. Traditional institutions can reach new audiences such as the home and the workplace, special groups (i.e. people with special need) via distance education, and can teach skills which are related to their position and work. They stressed that with the globalisation of the economy

and the gradual decline in manual labour, a time has come to realise and create the need for continuous education for all people throughout their lives, so that individuals can become efficient and effective participants of a society characterised by rapid change.

It also stressed the attempts made in the last few years towards knowledge upsurge as being very limited and voiced concern about the need for education to reach a wider cross-section of the community, and the need for making teaching complimentary to individual needs. A shift of focus was from "Education to all to Education to Individuals".

3. Lockwood, Fred. "The potential of Self Recorded Audio Tape Collection in Distance Education". Paper presented at the Annual Meeting of International Council for Distance Education ICDE, Bangkok, Thailand, Nov 9-13, 1992.

This paper contains the proceedings of the annual meeting of the ICDE, and explains the importance of data collection and other interviewing techniques. A few cases are reported by the author who made an attempt to study the potential use of self recorded tape for data collection in distance education. He comments upon a technique involving self-recorded audio cassette tape and its use alongside conventional qualitative data collection methods. The paper summarizes the findings obtained from these studies and analyses the potential contribution of this alternative method.

4. Matthewson, Claire. *The Philosophy and Role of Teleconferencing in Distance Education*. Report no. 355925 in ERIC, 1991.

The study discusses the impact of teleconferencing by suggestive titles. The author has rephrased the article with two other titles which would be more suggestive of its actual complexity in a simple manner, namely:

Bridging the Distance: extending possibilities, and Increasing the Gaps: the creation of elites.

The author has made an extensive study of two of the universities (The University of Otago in Dunedin-Newzealand, and the University of South Pacific in Suva, Fiji), where the roles for teleconferencing are totally different because of their varying needs. Besides linking the teacher and the distant learner, there are several roles for teleconferencing in distance education. One is bridging the gap between the learners themselves, and another is bridging distance among staff members. The author concludes with a few suggestive questions for future educators planning to introduce teleconferencing.

5. Nelson B. Hellar. "Telecommunication makes a call". (Education marketplace) *Electronic Schools Supplement: Business Week*, Dec. 10, 1990:

Telecommunication in education will become more common as distance learning, on-line data

bases and classroom telephones find greater use. The author has explained the need for maintaining these distance learning links that help students and teachers to respond to each other via communication lines or satellites. He also emphasized the need for such systems in rural areas, where qualified instructors are not available. They allow students equal access to specialized teachers. Phone lines can also be used to leave mail and keep track of absences or assignments. Online data bases can be accessed via modem by students using microcomputers. These data bases contain vast amounts of information on a wide range of subjects. The development in communication technology has increased the speed at which communication can reach the farthest or even the next door neighbour by means of High — band width. They allow easier use of multi-media materials and provide connectivity with distant computer network.

6. Gary R. Rowe "Print Literacy to Media Literacy. *Educational Technology*, Sept. 1994, p. 57.

The author outlines the impact of varying technologies. Efforts to create change in the education through application of new technologies often ignore fundamental calibrations of human experience. The author further examines the use and advent of the latest technology that has made many young learners to redefine what it means to be a learner. This refers to the **printed book**. It has reduced the act of learning to silent reading in solitude. The author outlines the usefulness of the print literacy. It empowers all people with information that was cheap to produce in large quantity, that was portable, easily stored, and translatable to other languages and delivered to interested readers at relatively low cost.

Now in the electronically bound world, a media democracy will feature unlimited quantities of information availability anywhere, software to translate from one language to another almost instantly and tools to share information quickly with others. In an important sense, the authors have impressed upon the utility of TV, computers, and the electronic devices like Electronic Mail, FAX, Teleconferencing etc. that help us to march backwards in time to recreate the human contact that was valued in the pre-print age. The public drama, shared experience and the involvement in enacting small stories and skits can be recast for the benefit of the younger generations and the distant learners. The emerging media democracy represents a phenomenal transition of consciousness which is now underway.

#### LEARNER CONCERN/STUDENT'S ATTITUDES

1. Raggatt, Peter. Serving individual Needs: The

New Challenge for Distance Education. *Distance Education*, Sep. 92.

This paper identifies a number of contemporary issues and their implications for distance education universities. Pressure on universities has resulted in the growth of other organizations that create and promote avenues to gain further knowledge, increasing access to higher education, and the new "vocationalism". The author further looks at individualised learning as the new challenge to distance education inspite of the fact that it is expensive and difficult to deliver in a distance education setting. Two areas have been identified wherein, learners may be given credit for the knowledge and abilities they have developed and suggests that they may be considered on par with the conventional degrees/diplomas achieved by formal education. A second suggestion is towards recognition of the development of a course called "Personal and Career Development," which is directed towards helping students to clarify their educational, personal and career goals and develop an action plan to facilitate their achievement of these goals.

2. Sewart, D. "Student Support Systems in Distance Education", Paper presented at the World Conference of the ICDE (International Council for Distance Education) Bangkok, Thailand, Nov. 8-13, 1992.

This paper discusses the nature of distance education support services and its underlying philosophy. It emphasizes that distance education must recognize the needs of the individual learner in an industrialized process where teaching is the dominant characteristic. Student support in distance education depends on the market, the package employed, the delivery system, the image of the organization, and the culture in which it operates. A major question arises about this philosophy and its operationality. The author highlights the importance of the service industry to be a source model of student support, since the distance educational organisation also has the same ethos as the service industry.

3. Bland, Kay P. and others. "Student Attitudes Towards Learning Link: A Distance Education Project". Paper Presented at the Annual Meeting of the Mid-South Educational Research Association, Nov. 11-13, 1992.

The purpose of this study was to investigate the first offering of two interactive distance education courses, Curriculum and Instruction and Educational Administration, on the basis of a study conducted at the Memphis State University. The team made a study with 70 graduate students enrolled in the classes, and the methodology comprised of written surveys, interviews and observation. Areas examined included study

habits, use of equipment, technical quality of sound and video, instructors' questioning techniques and the distance education environment. Findings revealed that the most effective instructional strategy was a well designed lecture supported by planned visual aids.

Suggestions were listed to improve the quality of teaching and the ability to become more skilled at orienting their methods to special conditions of distance learning context.

4. Shuqiang Zhang and Catherine P. Fulford "Are Interaction Time and Psychological Interactivity the Same Thing in the Distance Learning Television class room?" *Educational Technology*, July-Aug. 1994, p. 58-60.

The purpose of this article is to compare the perception of class room interaction and their levels of satisfaction in a 10 session interactive TV course in Science education conducted through the Hawali Interactive Television System (HITS). The course followed a stable format beginning with introduction of the days' topic, followed by a videotape demonstration for about 20 minutes on hands-on activities and student-initiated inquiries about the topic. The study aimed at finding the correlation between actual interaction time and student perception of interaction level. It was found that the student satisfaction and attitudes were highly correlated with over all level of interactivity perceived by the students. It was determined further that based on the observation of peer participation the individual performances showed higher degree of perception than that of individuals.

## EVALUATION

1. Tait, Alan. "Systems, Values and Dissent: Quality Assurance for open and Distance Learning". *Distance Education*, vol. no. 14, p. 303-14, 1993.

The volume examines the development of quality assurance in higher education delivered through open and distance learning. Highlights include recent publications on quality assurance, factors for change, key debate about organizational mission and management.

2. Bowser, Don, Race Ken. "Orientation for Distance Education Students; What is it worth?" *Distance Education*, vol. no. 12, p. 109-22, 1991.

The article discusses academic support for distance education students and describes the results of an evaluation of the orientation programme at the University College of Central Queensland (UCCQ). A questionnaire was used to determine the costs of the programme whether student needs were being met, orientation, attendance, and needed changes or improvements.

3. "Exploring Our Horizons". *National Conference*

*on Alternative and External Degree Programs for Adults* (12th, Evanston, Illinois, October 8-10, 1992). American Council on Education, Washington, D.C.

This is a report of a workshop on various aspects of adult learning and education which contains several papers. Some important aspects as far as evaluation is concerned are "As the Hub Turns", "Centripetal and Centrifugal Forces Acting on Long Distance/Extended Site Learning Centres" (Robert D. Clark and others), "Distance learning and a Dynamic Assessment of Quality" (Daniel Granger and Kate Gulliver), and "A Comprehensive plan for program Evaluation" (Dan A. Davis).

4. Andrews, Michael B and others. *An Evaluation Program report Athabasca University/Keyno College Capstone program*. Alberta University, Edmonton, Feb 1991.

An evaluative study was done of a joint project to enable students in the selected area to complete a full-time degree without leaving their home community. The evaluation identified problems which included issues of mandate, academic freedom, formalization, and administration and operation.

5. Schuemer, Rudolf, Ed. "Evaluation Concepts and Practices in selected Distance Education Institutions" *Research Report*. Fern Universitat, Hagen (West Germany), Jan. 1991.

This report contains in addition to the introduction and preface, 13 papers written by individuals working in the field of evaluation who present the concepts and practices of evaluation at their own particular distance education institutions.

## CONCLUSION

With the rising costs of books and journals, having access to an annotated bibliography in any field is a big advantage to any library and institution. This is even more true for the developing countries, where inadequate funding may not provide for all the resources in a library. Compiling an annotated bibliography would be the easiest method of conveying the abstracts to the various centres. Even though the learners and tutors may not have access to the actual journal articles, books or conference reports, such a bibliography would at least make them aware of the existing material in a quick and timely manner.

During the course of compiling this bibliography, the author was unable to find any other indexing or abstracting resource of this kind. It is believed to be the first annotated bibliography in the field of Distance Education in India. It is earnestly hoped that the efforts undertaken in compiling this material would help all scholars, researchers and students working in distance education institutions to catch up with the on going research and other activities in this new and fast expanding field.