

## Why Distance is a State of Mind

1.0 Open learning is a philosophy of learning that is based on the fundamental premise that there is a person who wants to learn. (Forsythe, 1985) The role of organizational structures which describe themselves as "open" or as "open learning systems" is to ensure the provision of the best resources for personalized learning to people *where they are and as they are*. In particular, the systems and cybernetic basis of much of the praxis of open learning is directly relevant to the integration of current computing and telecommunications technology and as such open learning can be categorized as an informational and systems base model. Distance education, from a survey of its published literature, (Wedder, 1986) is a methodology that is based on the fundamental premise that there is knowledge that can be taught. The role of the organizational structures that support distance education are to provide mechanisms for teaching "at a distance", emphasizing that the student and the agent of instruction are physically separate. It is often referred to as an "industrial" model because it concentrates on mechanisms for packaging, delivery and processing of instructional materials. Although these two concepts are often mistakenly used as synonymous with each other this paper will argue that there is a fundamental distinction of basic premise which has significant consequences for the learning activity of persons who utilize these approaches. This distinction is important if either of these approaches is to contribute to the development of a modern educational philosophy capable of integrating both current thinking and new technologies.

1.2 The distinction is philosophical and epistemological. Open learning is concerned with solving the practical problems of creating learning environments and opportunities for individuals to learn where they are and as they are. Although this often means that the learners may be in their own communities, the role of the system is to provide the resources and support structures to support learning regardless of where the learners may be. By extension, open learning may be practised within an institutional setting through the provision of structures that support **personal learning**. The methodologies of distance education vary in their philosophical stance and concentrate on adapting existing curricular structures for remote delivery, often using an industrial model of product delivery that emphasizes **individualizing of the same instruction**.

1.3 In particular, open learning is innovative, implying a rethinking of all aspects of the learning endeavour in order to support service to the individual person. This often implies novel curriculum, novel organizational structure and novel use of technology for connection-making. Distance education is adaptive, implying a translation of existing norms to different environment. This often means that administrative structures and curriculum designed for the campus milieu are adapted for the distant milieu. Open learning often involves the use of distance education methodologies. However, distance education rarely exemplifies the philosophy of open learning.

2.0 The rapid development of new technologies provides a number of issues which challenge us to consider our epistemology more deeply. Information technologies enable us to contain data and information as never before. Telecommunications

networks provide opportunities to deliver information and to provide opportunities interactions for learning regardless of where people live. Yet we have only recently begun to deal with the questions of whether "knowledge" can be contained or whether it is through our interactions that concepts are shared and formulated. The implicit assumption behind many educational methodologies is behavioural and mechanistic, with the implicit assumptions that people can be programmed, modified and shaped to fit an objective view of the world. Similarly, many educators actually believe that knowledge can be contained, packaged and delivered. Information and data can be transmitted but knowledge is a human phenomena which only has meaning when a person perceives this data to be of value. Knowledge is information of perceived value.

2.1 For learning to occur, the student must be an informing being and must perceive the distinctions in the information that makes the data new. Only then does an individual construct his or her understanding of a subject. Because understanding is something that the learner must experience, any learning system must be designed to deal both with the personal nature of each individual's quest for knowledge as well as providing the structure to enable the student to explore our publically held extrasomatic knowledge. (Forsythe, 1987) With the increasing use of powerful technologies, it is imperative that we clearly attempt to distinguish the nature of human learning and to establish a philosophical framework that will clearly acknowledge the autonomy of the individual learner and the role of imagination in human learning. Current interest in artificial intelligence clearly demonstrates the inappropriateness of our current thinking when marketing images suggest that it is only by becoming as fast and efficient as the machine that we can be intelligent. However, if we believe that "Intelligence is that which prevents us from achieving full machinehood" (Gregory, 1984) then we must develop an epistemological framework that clearly establishes the nature of our humanity in learning.

2.2 An inadequate epistemological framework will eventually enslave us to our technique and technology. A framework that addresses these questions in an open way, will enable us to develop dynamic and viable agencies that are alive with the interactions of people within them. It is crucial that these questions be raised as we chart a new course for learning in the new millenium. The philosophy and praxis of open learning as understood by this author, provides a powerful integrating epistemology for integrating technology into learning environments so that people and their machines are in mutually supportive and adaptive relationship. The issue is not one of overcoming distance,, the issue is personal autonomy in learning and the rights of the mind in the face of an increasingly complex and mechanized future.

2.3 Indeed, it is arguable whether a discipline of distance education is supportable in its own right without becoming an insular and closed study of delivery techniques which really have little to say to personal autonomy in learning or the nature of interaction in human learning. It may well be preferable to support the praxis of open learning through existing disciplines based on strong philosophical underpinnings such as those that lie behind general systems thinking and cybernetics, praxiology and epistemology.

2.4 More importantly, if we, as educators, are truly to remain open to learning ourselves then we must provide dynamic frameworks for questioning our epistemological assumptions. There is a tendency to abandon philosophy in favor of efficiency, methodology and technique. Praxis is philosophy in action and education of all professions must be clear about its philosophical assumptions. The metaphors we use clearly accentuate these distinctions. Some agencies seem to regard students as rats to run the gauntlet of administrative hurdles. Others act as if students were empty waiting to be filled while others see students as travellers on journeys of discovery through domains of knowledge. (Forsythe, Haughey, 1985) It is only when we ourselves are grounded in a strong philosophy of learning and change that we can assist our students to the unknown future with any sense of confidence and wonder.

2.5 This is why distance is a state of mind. By emphasizing "distance" in distance education, we emphasize the separation and the isolation of the learner. The power of the concept of "open learning" is that it emphasizes openness and access and learning. However the real distinction lies in whether we think we are dissolving distance through the provision of supportive infrastructures for learning interactions or whether we are emphasizing it through our desire to contain and package knowledge. Communication lies at the heart of all learning endeavours so a possible evolution of these two perspectives lies within a framework that deals with how we generate meaning through our communications regardless of whether they are mediated through technological delivery. The emerging methodologies of communication based education and tele-education begin to blur these distinctions as we increase our interactions in informational space.

3.0 Conversation Theory, a modern scientific theory of learning (Pask et al, 1975,76) provides a framework for addressing both the roles of technology in learning as well as the organizational structures necessary to support learning. Conversation Theory asserts that learning takes place during the conversation. A conversation is an interactive dialogue among autonomous systems in order to reach agreement or disagreement on a concept or construct. The phenomenon, which is the conversation, is the point where at least two participants or perspectives come together to assert, construct or create an analogy which will necessarily assert a distinction as well as a similarity relation between them.

3.1 The intriguing insight illuminated by Conversation Theory is that inquiry may be between perspectives within the mind of one person as well as among different distinct persons or psychological perspectives. Conversation Theory, with its basis in a non-Boolean proto-logic of coherence and distinction acknowledges that the "rationality" of our thought may be predicated on a variety of logics with differing truth valuations. Unlike the functionalist schools, where the ontology of dual states of truth is exemplified in true and false, Conversation Theory is a science of process, encompassed by an ontology of many truth valuations which exist as distinct entities and which form their

own necessarily dynamic phenomenology.

3.2 The implications of this very technical and sophisticated approach to the science of interactions in language are both common sensical and profound. It is extremely important to be concerned with the nature and quality of human interactions in the learning process since it is through the feedback and feedforward of these "conversations" that learning occurs. However, 'meaning' per se, does not exist apart from the interactions of two distinct psychological perspectives. Meaning is generated through the interaction. This radical approach forces us to pay attention to the nature of how our communication achieves meaning as well as to order the nature of interactions in the learning process, especially if these are mediated by technology or technique. In particular, in the development of learning systems we must turn our usual thinking around to consider the nature of the conversations that will be evoked for the person who wishes to learn.

3.3 If we take, as the kernel of the learning system, that there exists a learner who wants to know, to understand, to learn, then this assumption will necessitate a different approach to the solution of the complex problem of providing the most appropriate learning resources for this person where they are and as they are. Conversation Theory is perhaps the only current educational philosophy with sufficient depth and rigour to address these problems at every level of the educational enterprise. The learning system, at every level, must be designed to evoke conversations within the mind of the learner, between the learner and a learning agent and among other learners. In the classroom, this is often described as discussion or dialogue. Although there is a great deal of comparison between "face-to-face" instruction and "distance education" there is very little analysis of what is of value in such face-to-face encounters, especially when they involve 300 anonymous students and a lecturer. It is usually presented as a form of "magical" communion that obviously occurs when students and teacher share the same physical space.

3.4 This is precisely the issue. If we have not endeavoured to understand the nature of learning through interactions then we will not have an adequate framework to endeavour to design and develop learning systems intended to evoke learning interactions in which distance may be mediated by technology so that it is truly a "state of mind". Conversation Theory is meaningful for understanding in situ learning situations as well as those which may be attenuated in time and space, or which may be mediated by technology. The common denominator is the nature of human interaction that leads to learning.

4.0 In accepting the premises of Conversation Theory, that learning occurs through the interactive phenomena of the conversation, then the role of any medium, whether it is a tutor, or whether the mediation is contained in a book, television program, computer or even experiment, is as an agent of the conversation, where agency is ascribed the following functions

evocative or provocative of the imagination or thought of the learner (i.e. the conversation takes place in the mind of the learner)

or

evocative, provocative or convocative of shared conversation (i.e. the learner seeks conversation with another person)

We can further delineate these distinctions to consider the nature of direct interaction or indirect interaction. For example, a book is an agent of indirect interaction since the reader's thought is evoked through the creation of a conversation between the author, who is not present and therefore unable to join in discussion, and the reader who, through the act of reading is in a constant process of agreeing or disagreeing with the concepts put forth, through internal conversation. A letter may be an agent of both indirect interaction through reading and direct interaction since you may choose to converse with me after reading this by writing me a letter. These are not specious ideas when one begins to consider the design of sophisticated computer and telecommunications systems for learning and the implications for the nature and quality of learning interactions within these new "informational" spaces.

4.1 In designing learning systems both functions must be anticipated and constructed. The distinction between self-directed learning, open learning systems and distance education is the degree to which this pattern of feedback and feedforward allows for personal autonomy on the part of the learner. A correspondence course would not be a learning system if only books were sent out and no form of feedback established. Television by itself would have limited effectiveness in a learning system if it was not designed either to evoke the imagination and thought or to evoke shared conversation through interaction either at the level of the community or through live interactive television or adjunct teleconferencing.

4.2 Computers can act as direct and indirect interactive agents. However, understanding the nature of interaction and feedback is crucial in developing this medium for learning as it has the potential for us to simulate conversation in natural language where there is no truly a conscious participant in the interaction able to agree or disagree- it is still a vicarious agent of the human designer of the learning system.

4.3 Again, the educator must anticipate both effects, in designing systems for learning and in providing opportunities for shared dialogue, e.g. teleconference, learning centres, live interactive television, computer conferencing, electronic mail. Any medium may be used to be generative of conversation. Conversely, inadequate understanding of the underlying epistemology may lead to systems that are actually degenerative of conversation which inhibit the development of self-directed, mature thought.

5.0 Holmberg in his proposed theoretical framework for Distance Education supports a similar notion. He implies "that the character of good distance education resembles that of a guided conversation aiming at learning and that

the presence of the typical traits of such a conversation facilitates learning." (Holmberg, 1986) However, the use of the term "resembles" implies a form of facsimile, as if the student was receiving a copy and not the real thing. Indeed, some distance education institutions do indeed provide copies of audio-taped lectures and copies of lecture notes. But just as the true learning "on-campus" occurs through the interactions of the students with the ideas of others as they read, discuss, watch, listen and experience so the true learning of the long-distance learner also occurs as he or she reads, discusses, watches, listens and experiences within his or her own environment. To consider that this is somehow a second-best or second-hand alternative is to denigrate the commitment, self-determination and learning of thousands of successful students. Yet this attitude is one that permeates not just traditional institutions considering alternative approaches but has also been expressed by administrators of wholly non-traditional delivery agencies!

5.1 Conversation Theory, asserts that learning occurs through a certain quality of interaction known as the "conversation". The determining quality of the phenomena is the presence of two perspectives or participants capable of consciously agreeing or disagreeing. This may occur regardless of whether the agents of facilitating the conversation are physically present or not. A telephone call is a useful example of a technical medium for such concept sharing. Does a telephone call resemble a conversation or does a true conversation, take place through a defined domain of aural interactions? The issue of mediation via technology is important in terms of understanding the nature of the communicative interaction. However, the meaning of the communication is determined by the participants' interactions and their agreements or disagreements over shared concepts, and not by which medium they happen to be communicating within.

5.2 What needs clarification and heightened emphasis in this discussion is the acknowledgement and substantiation of the role of personal autonomy in learning. Assertion of our individual autonomy as persons lies at the heart of our notions of freedom and responsibility. Most importantly, our individuality generates diversity which is a prerequisite for thought itself. Conversation, used in this formal context, is not mechanistic or reductionist and its true understanding requires appreciation of the importance of interactions that lead to value and meaning.

5.3 The distinction between open learning systems and distance education is just such a distinction. The danger in models where technique and technology create resemblances and do not facilitate real meaningful interactions is the denial of the autonomy of personal learning. It is insidious to focus more on the design and delivery of the "package" and which medium is the best for delivery than to focus on how individual learners will be provided with opportunities for conversational interactions that will help them to learn to think and act critically. Technique and technology must be subsumed by a concern for human learning, and clear philosophical foundations for understanding our actions as educators when we work in information and

communication environments.

5.4 The design and development, the delivery , monitoring and maintenance of learning resources must clearly derive from the needs of persons as learners. As Holmberg suggests the issue is the guided conversation and how we design systems that create contexts for evoking such conversations. This does not mean that we should not use books, video-tapes or other forms of media to contain information. It does mean that in the design and development of the learning system, the fundamental questions must include:

How will this evoke conversation in the mind of the learner?

How will opportunities for direct and indirect interactions for feedback be provided for the learner to facilitate conversations for learning?

How can we best structure and sequence information and activities to enable learners to construct meaning from their experience?

5.5 Although Holmberg's use of guided conversation does relate to the more formal reasoning of Conversation Theory, his theoretical position does not fully acknowledge the powerful framework that this cybernetic construct provides. Although he does assert that "real learning is primarily an individual activity and is attained only through an internalizing process" he does not address how Conversation Theory can be used to understand the nature and structure of how persons individually construct knowledge through internal conversation or how this same notion can be used to develop organizational structures that are also conversationally designed and thus open to learning.

5.6 His concern is more to suggest that if "internalized conversation" represents a useful learning strategy, it is logical to draw conclusions from this to a teaching strategy which he describes as "guided didactic conversation intended to influence students' attitudes and achievements favourably. The more a student is dependent on guidance, support and encouragement, the likelier is the favourable influence of the guided didactic conversation." There is a fine line between enslaving the student to prestructured closed constructs and evoking and provoking open internal conversation through guided conversations that lead to open-ended learning situations.

5.7 A clearly cybernetic perspective such as Conversation Theory rests fundamentally on the autonomy of each participant in the conversation. This autonomy is denied if the intent is to make a participant "dependent on guidance, support and encouragement." Further, a radical extension of this concept suggests that all teaching is really learning since the current notion of teaching often implies a paternalistic or imbalanced power relationship where one person possesses more knowledge than another. If, as suggested by Conversation Theory, we acknowledge that knowledge is a process resulting from individual experience and not an object to be possessed independent of

human interaction, then this imbalanced notion ceases to retain the validity that enslaves us to it. It does, however, radically change our conception of how we conceive and implement educational schemes intended to provide learning opportunities for adults where they are and as they are.

5.8 This is why such care must be taken in understanding the basic philosophical premises of open learning and distance education. To be learner-centred means to acknowledge the individual autonomy of each learner, and to design learning materials and construct learning organizations whose entire focus reflects this basic premise. Individualizing instruction whether through distance education or in the classroom does not necessarily acknowledge the autonomy of personal learning or appreciate the fundamental creativity of human learning. The development of a discipline is more than the development of a methodology. It is also a philosophy and conceptual structure which offers coherent approaches to solving problems within the area it purports to address.

6.0 Distance Education, as a discipline, offers a conceptually weak solution to a much larger world-wide problem -that of access to learning opportunities. The philosophy of open learning, with its systems and cybernetic roots, provides greater depth of application and greater breadth of approach particularly in the potential to integrate technological and humanistic perspectives. Conversation Theory offers education in general a rigorous and illuminating new epistemology for considering the nature of relationship and interaction in learning. However, philosophy is not merely an academic issue. It is a praxis, a way of acting and being, an attitude and state of mind that affects every aspect of the institution. It is an openness to and respect for the possibility of human potential.

6.1 *Openness means providing open access without restrictive entry qualifications.* This does not mean allowing people to try something for which they are obviously unprepared. It does mean acknowledging the intelligence of adult learners *as they are* and not how an administration wants them to be for reasons that are historical or arbitrary.. It means providing a flexible, modular support structure that will enable motivated learners to quickly fill-in gaps in skills and knowledge necessary for proceeding towards their goal. This means treating adult learners as mature adults and not truculent adolescents who have learned nothing from their life experience.

6.2 *Openness means open to place.* This does not mean focussing on distance as the definer of the environment for learning. It does mean addressing the problem of providing the best and most appropriate resources wherever the adult learners may be, acknowledging *where they are*. If the system is designed to respond to the "lady in the lighthouse" then it will be flexible and adaptable enough to respond to five people in a community or to fifty-five! However, using this as a determinant to **not** solving the problem avoids the issue. When an administration refuses to use an available technology because they cannot guarantee its accessibility to the entire population they are ignoring the fact that no existing learning resource suits all of the people all of

the time. The issue is providing the best and most appropriate resources to the learner *where they are and as they are* - not closing the door in advance of the need. Equity of access comes from providing variety and flexibility of opportunity not from uniformity. It is an institution's responsibility to ensure that the resources are comparable and appropriate. This means that the institution must have a clear organizing framework for adaptability and flexibility.

6.3 *Openness means open to time.* This does mean endeavouring to provide a system that can be accessed every day at any time. This does not mean setting arbitrary starting dates purely for administrative convenience when this is not necessary for learning or when it clearly denies the social patterns of a particular community. Providing pacing schedules and structured completion options recognizes the autonomy of the learner when these are meant to support and enable and not preclude and inhibit learning. This requires a respectful administration who sees their role as supporting and valuing adult learners, their life situations and their struggle to achieve.

6.4 *Openness means open to method.* This does mean acknowledging that there are many ways of learning and that there may be many methods of providing resources for individual adult learners to use. This does not mean defining, for production, economic or administrative convenience, one method of packaging resources for learning that then becomes the de facto standard to which each individual must then conform. This may have been economically expedient in past models but telematics, electronic publishing, VCR's and other technologies mean that this may no longer be the most economic or appropriate way to prepare learning resources. We are over-producing information and undervaluing interactions. Most importantly, we need clear epistemological frameworks that we continually question and develop, in order to ground our practice in considered theory. A cybernetic epistemology such as Conversation Theory does provide a framework for establishing "exit criteria" from a subject domain and a mechanism for an individual learner to map their own curriculum pathway through a range of existing learning opportunities.

6.5 The distinctions drawn here are important because they focus on the subtle differences that occur in service to learners in a system committed to an open-learning philosophy and those served through distance education. In open learning systems, any appropriate technology will be in use because the determining factor is not the technology but whether it will further enhance or extend the learning opportunity. More importantly, the role of human beings in the learning relationship is defined and valued, whether this be as designers of systems or as tutors involved in the day-to-day learning interactions.

7.0 Clearly, the problems faced in providing educational opportunities to large numbers of people accentuate this paradoxical problem that these new methods hold the promise for personalizing learning yet also offer the potential for a mass production approach. How can open learning begin to

provide a framework for solving massive social problems of this kind in an economic fashion yet remain responsive to the needs of each person? The development of new computing and telecommunications technologies open up the possibility to address this problem in creative and original ways. The issue, however, is not technological determinism but rather a heightened need for clear thinking about the uniquely human aspects of learning.

7.1 The issue lies in understanding the distinction between personal learning systems and individualizing instruction, between knowledge as a process of valuing experience and information and knowledge as a commodity to be packaged, between the institution as a learning partner, guide and coach for the adult and the institution as the guardian and keeper of intellectual value. The issue is not distance but the nature and quality of communication among the staff of the educational agency and its students. An attitude and philosophy of openness to the learner and a willingness to communicate to help the adult learner no matter what his or her circumstances should determine the underlying architecture of any enterprise serving distant learners. Artificial emphasis on the problems of distance obscures the real potential of openly interacting for purposeful and meaningful communication.

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