

Distance Education and the International Computer-Mediated Consortia: Projects Serving the Humanities Doctoral Program

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ABSTRACT

The concept of the computer as the new literacy is introduced and its implications for education are discussed. The rise of distance education programs are introduced and the role that computer management courseware plays in the doctoral program in the Humanities is discussed. There is a strong component of distance education at Kenyatta University in Nairobi, Kenya. What is new about this program is that it will enable faculty from distant universities to teach at each other's campuses. Furthermore, students from a wide region surrounding Kenya may participate in this program. Kenya is among the first of seven universities in the African Diaspora that will be participating in this distance education venture.

INTRODUCTION

Distance Education is an instructional delivery system that does not require the student to be physically present in the same location as the instructor. The instructor and the student are separated by both time and distance. When this occurs, it is called asynchronous instruction. Most distance education programs utilize this form of instruction¹. The medium of this form of instruction may range from the use of video, audio or web based communication. It is this use of educational media that unites both the student and the instructor. This change in education has increased tremendously with the advent of the computer and currently there are more than 5 million distance learners in the United States alone². **Computer-Mediated Instruction** (CMI) has proven highly success and this is because of the power of the internet. There are over 30 million computer addresses over the internet and these can be found in more than 50 countries (Hughes, 1994). Obviously, the internet is the world's largest and most powerful computer network. It has come a long way since its beginning in Geneva, Switzerland, as a project within CERN, a European laboratory

¹ There are many distance education programs where the instructor and the student are in contact with each other at the same time. This approach is called synchronous education. Teleconferencing is an example of synchronous education (Willis, 1993).

² If one looks at the whole picture, there have been over 130 million users of distance education programs since correspondence schools began in the 1890s.

for particle physics (Kochmer, 1995). Later, scientists at the National Center for Supercomputing (NCSA) at the University of Illinois took the concept one step further and created a browser, MOSAIC, that utilized a special computer language (HTML). This was the precursor of other browsers, Netscape and Microsoft's Internet Explorer. What began in France and was further enhanced in the United States is now known as the World-Wide-Web (WWW). It is within this context that the distance education component of the new humanities doctorate at the University of Louisville operates. It provides CMI, CAI, teleconferencing, and course management software.

HISTORICAL DEVELOPMENT OF DISTANCE EDUCATION

Historically, Distance Education meant correspondence courses. For example, the earliest distance education programs were developed at Pennsylvania State University in 1892. This program provided agricultural courses for farmers. In the 1920s, they offered their courses through radio broadcasts. They expanded their courses for veterans on the G.I. Bill through public broadcasting and television. Currently, they offer a range of courses through various media: television, radio, satellite, and web-based media. Of special interest to others in the field is their division of their delivery systems into three units.

- The World Campus Program
- Independent Learning Program
- Distributed Learning Program

The University of Louisville participates in the **World Campus Program** (cf. Appendix). It allows students on campus to join others around the country in participating in technology-based courses every semester. **Independent Learning** consists of courses of general interest that may be used to complete a degree or certificate. Students are allowed to enroll at any time during the year and follow a self-paced regimen. **Distributed Learning** is a kind of distance education this offers on-site training. They provide access to the on campus courses.

TYPES OF DISTANCE EDUCATION PROGRAMS

The key players in distance education are the students, the faculty, facilitators, support staff and administrators. How these groups function with each other determine, in large part, the kind of distance education program that exist (Gustafson and Powell, 1991).

- **Students** – Programs should be made to meet the instructional needs of students. Successful distance programs require students to have a certain level of expertise with computer software, the use of the internet, and file transfer procedures (Holmberg, 1985). These students also need to demonstrate a high level of literacy required for position papers, term papers, reports, and other forms of information sharing. Students who are inner directed do better in such courses than those who are not.
- **Faculty** – There are many challenges that face faculty members who want to provide course instruction through course management software. They need to learn to control the methodology, work with a diverse student population, provide a range of teaching styles, and be sensitive to cross-cultural modes of communicating. Most importantly, the distant teacher has few visual cues. He does not have the richness of

face-to-face contacts with his students and finds that this spontaneity has been altered by time and place. What this means is that distance educators must learn how to assess his students through their literacy skills. Students who do well on putting their world on paper (Olson, 1994) also do well with putting their worlds into the realm of virtual reality.

- **Facilitators** – In many distance education programs, there are local facilitators who assist in the process. In some programs, for example, a university will send its faculty to a distant site where they can meet face-to-face with the students. This is the work of a distance education facilitator. He knows that such face-to-face encounters not only allow the faculty to better evaluate the students in the program, but it will also enable them to receive credit for residency within the program. A typical difficulty for such an administrator involves the synchronization of time frameworks across educational systems. Foreign universities begin and end their academic years at different times. This is not surprising as even in the United States, universities differ; some have a quarter system and others follow a semester or trimester mode. Local facilitators also assist in the administration of examinations over the internet. They confirm that the students are identified and their status verified. In some cases, students have to travel to a regional examination site where a facilitator awaits them.
- **Support Staff** – These are the unsung heroes of distance education. They are the ones who officially run the course management software. They are the ones that faculty turn to for assistance in times of difficulty. They are the ones who place students into the programs; provide them with sign in names, passwords, and official status in the course (Verduin and Clark, 1991). At the University of Louisville, this function is done by the Adelphi Center. They not only administer courses, they also train faculty in the use of the system.
- **Administrators** – Even though the technical managers are the ones who create and administer distance education programs, the administrators ensure that the academic mission of the program is not compromised. They are the ones who act as decision makers when changes are needed within the system and they are the ones who act as referees whenever disputes arise among the various players in the system.

Most universities are well equipped to provide both service and support for distance education. At the University of Louisville, the Delphi Center performs these functions. Similarly, at the University of Louisville there are also administrators within the system who oversee the development of distance education. Hence, all of these aspects of distance education that are needed to make the new Humanities Doctoral Program a success have been met.

TYPES OF DISTANCE EDUCATION TECHNOLOGY

When one goes to an ATM machine to either withdraw or deposit money, that individual is participating in functions in an **Asynchronous Transmission Mode (ATM)**. It is this ability to send data in irregular intervals through a computer code that also allows computer users to participate in distance education programs where they communicate with their instructors much in the same way as an ATM machine. The only difference is that the computer allows for more complex code transmission that includes voice, sound, graphics,

color, and print. By means of a **File Transfer Protocol** (FTP), the student and the instructor are able to share information files.

Many faculty members use computers in their classrooms to assist in their instruction. This approach to education is known as **Computer Assisted Instruction** (CAI). It involves the use of a wide range of software programs such as PowerPoint, Front Page, and Word Processing. When the instructor wants to extend this use of technology beyond the classroom and into the homes of his students, he extends his use of technology by means of course management software. One of these is called Black Board. It provides each student with a password, a classroom homepage, and an address over the internet (Willis, 1994). At the University of Louisville, there are several class management software options available to instructors, Blackboard and Eduprise. Both are user friendly and provide for a wide range of services such as grading tests, evaluating test questions, links to other sites over the internet, chat rooms, threaded messages, sending files, posting messages, and so on. In other words, the course management software also provides for **Computer-Managed Instruction** (CMI)³.

THE HUMANITIES DOCTORATE PROGRAM

The Pennsylvania State system has provided a working model for most Distance education programs. It allowed both self-paced courses and institutionally scheduled courses. These options have been utilized in different ways in the field. For example, academic institutions favor scheduled instruction while trade schools and correspondence courses prefer the self-paced mode of distance learning. At the University of Louisville, for example, these courses are called Extended Distance Education courses (cf. Appendix). An instructor meets with his students on campus and provides access to others to join the class through distance education. There are usually two syllabi: one for onsite courses and another for those involved in distance education. In some cases, the lectures are digitized and placed onto the course site where students are able to listen to them at their convenience (Busch and St. Clair, 2000).

In addition to having an institutionally scheduled program based on a semester schedule, what makes the distance education program within the Humanities Doctorate Program unique? There are several features associated with this program that merits comment. First, the distance education program is targeted for students who are already academic professionals and who are teaching in China and Africa. These are students who have the equivalent of a doctorate, the terminal Master of Arts under the old British model of education. Many of these students are already international known scholars. They merely want to upgrade their credentials to a doctorate, the German model of university education.

Second, the residency requirements for these academic professionals have been shortened to one year. In the future, the university intends to fulfill some of these requirements by holding classes at an overseas academic site. Georgetown University already does this and is in its third year of distance education. It flies its entire faculty to Tokyo where they hold their classes and meet their own residency requirements. What the University of Louisville strives to accomplish is a blend of the two models, partial on-site instruction overseas.

Third, if a student meets the residency requirements by attending courses at the University of Louisville, he may return to his country where he will continue to take graduate

³ The use of CAI and CMI is referred to as **Computer-Mediated Education** (CME) or **Computer Mediated Communication** (CMC).

courses through distance education. There may be occasional trips to the United States for special graduate seminars during the summer session, viz the Capstone Course.

Fourth, English counts as a foreign language for students from China and Africa. A student is required to take two foreign languages. A second foreign language can be learned from a course called Humanities 640: Language X for Reading. Any student who has taken a course in a foreign language where the instruction in the course is in that language, may request that such a course be used to meet the foreign language requirement. For example, students who attend advanced courses in French or Spanish where the instruction is entirely in those languages will be given credit for that course if they attained a grade of B or higher.

Fifth, when a student returns to his home country with a doctorate in the Humanities, he becomes a part of the program's network. He may teach courses in his home country for students in the University of Louisville program or he may even participate in the doctoral program as an adjunct professor. After a while, there will be a substantial number of graduates in the overseas system and at this time they will be able to play a more central role through the degree granting institution as program faculty or facilitators.

Sixth, the program at the University of Louisville is part of international consortia. The idea of a consortium, a combination of institutions that share courses, faculty, and sources, is not new. The Kentucky Commonwealth Virtual University (cf. Appendix) represents a consortium of distance education courses within the state of Kentucky. All universities and colleges are allegeable to participate in this center for distance education. There are also regional consortia such as Nova Southwest University (cf. Appendix) whereby a university has regional satellite campus all connected by distance education over several states in the region. What makes the University of Louisville of Louisville different is that it is participating in international consortia with institutions in Africa (Kenyatta University) and China (Nankai University and Harbin Institute of Communication).

Lastly, the University of Louisville has created a mentor program for its students. After a student has been admitted, he will be assigned a committee and a faculty mentor within the group. Usually, the mentor is someone selected by the student. His task is to keep in contact with the student and to be available to that student with regard to any kinds of problems that he may be encountering while going through the program. The mentor program will be used for students from within the United States, but it was actually created for students from China and Africa who are participating in the doctoral program.

There is one problem associated with most distant education degree programs emanating from the United States that needs to be resolved, viz., the high cost of distance education for Third World countries. Most universities have a special tuition for students from within state boundaries and another for students who are matriculating from other states. In this case, the out of state tuition usually doubles. What is appalling is the fact that foreign students have to pay a much higher tuition than all others. Why should such differences in cost exist? The usual answer is that the citizens of the state are paying for the cost of running their institutions of higher learning. They do not want to finance the education of out of state or out of country students. What are the consequences of this action? It means, in essence, that students from Third World countries cannot afford the cost of an American education. One may have a wonderful distance education program, but what good is it if overseas students cannot afford to pay for access into that system. This is a major problem in distance education. There has to be a system of special low cost access for these students. If not, it will

only limit access to the system to the sons and daughters of the politically wealthy few. By its nature, it would prohibit its target audience access into the system.

PROJECTED PROBLEMS AND SOLUTIONS

There are several aspects of distance education that merit special comment. If one asks, for example, whether or not distance education is effective, an affirmative reply would not be sufficient. One needs to probe further and ascertain how and why such programs are more effective than others (Moore and Thompson, 1990). In particular, there are issues that need to be addressed within distance education with respect to literacy skills, teaching styles, cognitive styles, and cultural differences.

Literacy constitutes the first problem area in the realm of distance education. Many instructors claim that their students do better in communicating through electronic mail. Some scholars attribute this to the fact that a student does not have to face potential problems of embarrassment that one encounters in the classroom (Ehrmann, 1995). This innocent claim seems plausible, but it masks a deeper concern, one of literacy. David Olson (1994) is a cognitive psychologist who has openly addressed the question of literacy. He refers to it as putting the world on paper. It means, in essence, taking one's oral skills and learning how to communicate that information on paper. This is not an easy task. For example, many students who learn how to write at the collegiate level in their own native languages encounter this problem of literacy. They already know their native languages and what they are learning in the college classroom is the enhancement of their literacy skills. This shift from orality to literacy requires a cognitive shift, a new way of seeing the world⁴. These students must learn how to think in prose, speak in prose, and write in prose. Unfortunately, writing in electronic mail is closer to orality skills than it is to prose. Students do well with E-mails because it does not require them to use rely heavily on their literacy skills (Misanchuk, E. R. 1992). This practice of using E-Mails is comparable to having a conversation in virtual space.

The second concern has to do with class size. Many have the illusion that the size of a distance education class is unlimited and that instructors are imprisoned by their students at all times of day or night answering electronic mails and responding to student concerns. Any program that operates in this way totally undermines the rationale behind distance education. If one sees it as a financial treasure or an economic venture, the program will fail due to the attrition of its faculty. Class sizes must be regulated. It is estimated that the maximum size of a class should be 25 students or less (Willis, 1993). If a class goes beyond this number, then the program support staff needs to create a new class or divide larger class into two equally sized classes.

The third area of interest has to do with the kind of student who is successful with distance education. There are students who are outer-directed. This means that they do things only when others encourage them or when their own peer group decides to do something. It is

⁴ Walter Ong (1982) has discussed the differences between oral and literate cultures in detail. He argues that television favors the interactional styles associated with oral cultures and refers to this phenomenon as "secondary orality." What one finds in televised courses is concomitant with the concept of secondary orality and for this reason such courses do not enhance literacy skills. Those who advocate teletraining modes of interaction (Chute, Balthazar and Poston, 1989) are also misled the ease of communication in courses where the demands of literacy are not encouraged.

estimated that about 80% of Americans are outer-directed. By way of contrast, there are those students who are inner-directed. They are self-motivated, self-paced, and goal oriented. These are the students who do well in distance education (Chyung, 2001). What does this mean for the outreach programs proposed by the University of Louisville and their doctorate program in the Humanities? It means that students from China tend to be more inner-directed and should have greater success in such a program. It also means that those students from Africa who are inner directed are the ones that should be encouraged to participate in the program. These differences in students change from one generation to the next. What this means, in essence, is that not all students will do well in the program unless they are highly motivated, centered, and possess high literacy skills (Moore, 1972).

The fourth area of concern in distance education centers on its philosophy. Currently, many programs are based on the traditional model of education in which students are merely involved in the task of information processing. The teacher transmits a fixed body of knowledge to the student through concrete examples and it is the task of the student to develop his own images from this experience, to construct new knowledge from the distance education interaction. There are many followers of Piaget (1963) and Vygotsky (1978) who advocate a constructivist model of education (Bednar, et al., 1992; Lebow, 1993). This approach is context situated and based on problem solving learning. It is the task of the student to construct a solution to the problems proposed by the course instructor. In this approach, the teacher is interest in the process that students go through. The focus is not on information nor on symbolic descriptions, but on problem solving abilities. What is interesting about this model is that it favors some disciplines over others. Not all education can be said to be based on problem solving. Even within the same discipline, some aspects of the field involve problem solving and others necessitate the use of traditional methods. As interesting as the Constructivist Paradigm may be, it is not a panacea. It cannot constitute the only model for distance education. This problem can be resolved by providing a balance between these methodologies.

CONCLUDING REMARKS

Computer Mediated Instruction is the new literacy. Those universities that do not participate in this new form of internationally exchanging knowledge will be disadvantaged in the long run. Perhaps the greatest potential to this new format can be found in the integration of experts from various educational institutions around the world. This new format has already replaced the older system of international teleconferencing.

There is one major problem that remains to be resolved in distance education. This problem has to do with the high cost of tuition for foreign students. In most countries around the world, higher education is absorbed by state and federal agencies. In the United States, however, the tuition fees for distance education are very expensive. This is because in the United States, education is a business. It is a money making venture. This limits the audience of foreign students to the children of aristocracies or business tycoons. It denies higher education to the masses. This problem needs to be addressed and resolved.

REFERENCES

- Bednar, A. K., D. Cunningham, T. M. Duffy, and J. D. Perry. 1992. "Theory into Practice: How do we link?" In T. M. Duffy and D. H. Jonassen (editors), *Constructivism and Technology of Instruction*. Hillsdale, NJ: Lawrence Erlbaum.
- Busch, John and Robert St. Clair. 2000. Graduate Course, Sociology 630: Social Theory. Eduprise Course. <http://www.eduprise.com/pages/1.asp>
- Chute, A., L. Balthazar, and C. Poston. 1989. "Learning from Teletraining." In Michael Moore, Editor, *Readings in Distance Learning and Instruction*. University Park: Pennsylvania State University.
- Chyung, Yonnie. 2001. Systemic and Systematic Approaches to Reduction Attrition Rates in Online Higher Education. *Distance Education*, 15 (3), 36-49).
- Ehrmann, Stephen C. 1995. "Moving Beyond Campus-Bound Education. *Chronicle of Higher Education*, July 7.
- Gustafson, K. L. and G. C. Powell. 1991. Survey of instructional development models with an annotated ERIC bibliography. Syracuse, NY: ERIC Clearinghouse on Information Resources. (ED 335 027).
- Holmberg, B. 1985. Communication in distance study. In *Status and Trends of Distance Education*. Lund Sweden: Lector Publishing.
- Hughes, K. 1994. *Entering the World-Wide-Web: A Guide to Cyberspace*. Enterprise Integration Technologies.
- Kochmer, J. 1995. *Internet Passport: Northwestnet's Guide to our World Online*. Bellevue, WA: NorthWestNet and Northwest Academic Computing Consortium, Inc.
- Lebow, D. 1993. "Constructivist values for instructional systems design: Five principles toward a new mindset." *Educational Technology Research and Development*, 41 (3): 4-16.
- Misanchuk, E. R. 1992. *Preparing Instructional Texts: Document Design using Desktop Publishing*. Englewood Cliffs, NJ: Educational Technology Publications.
- Moore, M. G. 1972. Learner Autonomy: The Second Dimension of Independent Learning. *Convergence*, 5 (2) 76-88.
- Moore, M. G. and Thompson, M. M. M. 1990. The effects of distance learning: A summary of the literature. *Research Monograph No. 2*. University Park, PA: The Pennsylvania State University, American Center for the Study of Distance Education. (ED 330 321).
- Olson, David. 1994. *The World on Paper: The Conceptual and Cognitive Implications of Writing and Reading*. London: Cambridge University Press.
- Ong, Walter. 1982. *Orality and Literacy: The Technologizing of the Word*. London: Methuen.
- Piaget, J. 1963. *Origins of Intelligence in Children*. New York: Norton.
- Verduin, J. R. and T. A. Clark. 1991. *Distance Education: The Foundations of Effective Practice*. San Francisco, CA: Joseey-Bass Publishers.
- Vygotsky, L. 1978. *Mind in Society: The Development of Higher Mental Processes*. Cambridge, MA: Harvard University Press.
- Willis, Barry. 1993. *Distance Education: A Practical Guide*. Englewood Cliffs, NJ: Educational Technology Publications.

Willis, Barry. 1994. *Distance Education – Strategies and Tools*. Englewood, New Jersey: Educational Technology Publications.

APPENDIX: ESTABLISHED DISTANCE EDUCATION PROGRAMS

African Virtual University. <http://www.avu.org/>

American Distance Education Consortium. <http://www.adec.edu/>

Annual Conference on Distance Education. <http://www.avu.org/>

Blackboard Course Management Software. <http://uoflcourses.blackboard.com>

The Distance Education Clearinghouse. University of Wisconsin, Extension Service.
<http://www.uwex.edu/disted/>

University of Louisville. Distance Education and Continuing Education.
<http://www.ddce.louisville.edu/>

University of Wisconsin. Annual Conference on Distance Education. August 13-15, 2003.
<http://www.uwex.edu/disted/conference/>

The World Campus Program. Pennsylvania State University. This program is available to other universities on a semester basis. Faculty and students interact as a group.
<http://www.worldcampus.psu.edu/pub/index.shtml>

World Lecture Hall. University of Texas at Austin. <http://www.utexas.edu/world/lecture/>