

Experiences, Observations, and Applications: A Student's Personal Account of the MDE Program

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The MDE program offers students an exciting, flexible, and unique educational opportunity for studies in all aspects of distance education. This paper begins by briefly describing the author and the factors that led to his enrollment in the program and then proceeds to outline his first-hand experiences and general observations, drawing upon relevant research as appropriate. The paper then goes on to explain how the program has provided the author with immediate applications in his career as well as guidance and suggestions for future endeavors. The paper concludes with a discussion of key issues for the program to consider.

"To change and to improve are two different things." - German proverb

1. Introduction

The Master of Distance Education (MDE) program, begun in Spring 2000, is a joint effort between the University of Maryland University College and the Carl von Ossietzky University of Oldenburg in Germany. This innovative program is offered exclusively at a distance via Web-based instruction and requires only that students possess a bachelor's degree (there are no testing requirements). As the program has now passed its two-year anniversary, a broad review of its accomplishments and status is in order. This paper will offer a general overview of the author's experiences and observations, and then conclude by illustrating how the program's instruction and experiences have directly and indirectly influenced his work environment and professional goals.

2. Why MDE?

I am presently serving as the Coordinator for the Business Programs department and as an adjunct instructor at Santa Fe Community College in Gainesville, Florida, a mid-sized institution (present enrollment is approximately 13,000) serving Alachua and Bradford Counties. Beginning in 1998 the college began developing its Open Campus program that offers Web-based versions of many of its courses, an effort that has seen steady and substantial growth (approximately 25% annually) in the ensuing years. As my department became more and more involved in this effort, my awareness and appreciation for distance education (DE) grew. Simultaneously, it became apparent to me that in order to advance or obtain increased teaching opportunities in higher education it would be necessary to complete a minimum of a master's degree (I had begun a traditional master's program in sociology several years earlier but was unable to complete it due to conflicts between course scheduling and my professional responsibilities).

After researching several possible graduate programs offered through traditional education providers (including my local alma mater, the University of Florida), I began investigating DE alternatives due to my dissatisfaction with the structure and curriculum of available traditional providers, a need for flexibility in my learning due to my varying work schedule (n. b. Khan, 2001), and a growing professional curiosity regarding DE. Although I had never personally engaged in distance education as a learner, I was quite comfortable with most forms of computer mediated communications (CMC) and felt that at this stage in my life I would be sufficiently disciplined and dedicated to complete a degree via DE, especially one offered through Web-based methods which would allow for greater and more immediate interaction between myself, the instructor, and my classmates (n. b. Hülsmann and Peters in this volume; Latchem & Hanna, 2001). A quick reading of the available literature increased my feelings of confidence in this decision, at the same time encouraging me to seek out a fully accredited program from an institution with both name recognition and a strong reputation in order to increase my marketability as an administrator and as an educator in higher education. In my position I have served on numerous search committees and have witnessed first hand the prejudices many educators possess regarding credentials awarded by private for-profit institutions, especially those offered through DE (n. b. Jones, 2001).

After extensive research through both print and Internet articles (demonstrating Rumble's (2001) observation that the Internet greatly facilitates comparative shopping between education providers), I discovered several articles that described UMUC in highly favorable terms. Although I would be required to pay out-of-state tuition and fees throughout my studies, I became thoroughly impressed by the description, objectives, faculty, and structure of the program, which promised both theoretical and applied orientations to its coursework and offered studies in a broad assortment of subject areas in DE. I was also attracted to the fact that the program was a joint effort between UMUC and Oldenburg University, promising a more international perspective to my studies. After corresponding with the director of the program, Dr. Eugene Rubin, who allayed my final concerns, I enrolled in the program and began my coursework in the summer of 2000.

3. Experiences

In the MDE program, class sizes to date have ranged from approximately fifteen students to no more than twenty-five, a situation generally comparable to many other Web-based programs (Rumble, 2001), including that of my college, and in accord with recommendations offered by Haughey and Anderson (1998). It is my opinion that these modest class sizes facilitate and encourage the guided didactic conversations (Holmberg, 1995) that have been common throughout my coursework. Levels of interaction with instructors have tended to be high, involving primarily asynchronous forms most commonly conducted through conference (discussion) boards and e-mail (n.b. Hülsmann and Peters in this volume), though occasionally chat rooms and telephone conferencing have been utilized as well. It is my belief that the interaction between myself and my instructors has actually been higher on average than that experienced in my face-to-face classes at both the undergraduate and graduate level. Additionally, I would further argue that the feedback I have received on both my conference postings and on my papers has been more thorough, considered, and helpful

as well. Responses to queries or postings have been timely overall, tending to be given within a day or two and demonstrating that instructors monitor their class conferences frequently; in those few cases when it has not been the rule, students have been quick to point this out to their instructors who have generally been receptive to criticism. The instructors and visiting experts in my classes have been a diverse lot, composed of well-respected academics from the U.S., Canada, England, Sweden, and Germany to date who have facilitated students' learning from both theoretical and applications perspectives. This has directly and indirectly fostered a more international orientation to MDE studies, allowing non-U.S. students to feel more comfortable as well as broadening the awareness of U.S. students. Courses have been generally well organized, with instructors making extensive use of advance planners and providing clear guidance for the assignments given. When questions have arisen regarding requirements and expectations, most instructors have demonstrated a sincere effort to alleviate any confusion through sample problems, essays, and open discussion.

With regards to the structure of the courses, all are semester based, deadlines are given for completion of assignments, schedules have been created and maintained for the flow of curriculum, and all instructors have insisted to one degree or another on students' participation in class conferences (with some assigning a portion of the final grade awarded based upon it). In short, in many ways these courses are "virtual classrooms," resembling traditional instruction; with this said, however, there are many differences to be found (n. b. Hülsmann in this volume). With few exceptions, instructors have demonstrated openness regarding paper and project assignments, allowing students to pursue interests more in line with their professional needs and goals (i.e. academic, government/ non-profit, or commercial) (n. b. Peters in this volume). To a large degree students have been encouraged to draw upon their personal and professional experiences in conference discussions, a practice that appears to increase the contextual understanding of subject matter. In addition, the program has a required set of core courses that make up a majority, but students are allowed a choice of electives to complete their program requirements that serves to focus their studies towards areas of greatest personal interest and need.

Students in my classes have tended to fit the general model of DE (Holmberg, 1995) in that they are to a large degree non-traditional and working; needing flexibility for their studies due to personal, family, and/or professional circumstances; and often simply possessing a preference for this mode of learning. Students have come from all walks of life: educational institutions (all levels), business, government, military, and some retirees pursuing learning for learning's sake. Although the majority of students are from North America (most from the U.S.), others have been from Asia, Europe, and Latin America. This diversity has added significant value to my learning experience, exposing me to the broad assortment of perspectives and experiences shared by my classmates (n.b. Harasim, 1996; Mason, 1998).

Once again, interaction has been primarily through class conferencing boards although e-mail, chatrooms, and the telephone have been utilized as well. While it has been the rule in my courses that students are encouraged to discuss any subject they might deem appropriate and applicable to the course' subject matter, conference postings tend to be primarily curriculum driven overall. However, all classes have maintained a conference board for general use as well as for social messages to the class, humorous postings, and miscellaneous messages that are not directly related to official class discussions. These

have proven to be popular, allowing students an informal space to address classmates as well as to lighten the mood through the sharing of humor or personal announcements (e.g. earning a certificate in the program, marriage, the birth of a child, etc.). It is my opinion that these practices have further served to create a greater sense of community between students, allowing them to see another dimension of their peers and foster the creation of a cohort group (n. b. Harasim, 1996). Chat sessions, although not terribly common to date, appear to also serve this function as well (n. b. Day, Crump, & Rickly, 1996; Suguri et al., 2002).

With regards to access to literature, instructors with the assistance of the university's copyright clearing office, routinely upload reprinted texts from journals and books to make them available online. Additionally, the UMUC library has an effective inter-library loan system established as well as several databases providing access to a large number of abstract collections and entire articles. The study of DE itself benefits enormously from a robust community of scholars and practitioners who have made their research freely available online through Web-based journals and periodicals. Additionally, my fellow students have contributed greatly towards a broader understanding of DE in that they have frequently shared online and text references from their professional and academic experiences.

In terms of workload, my experience has been that it is roughly comparable in terms of total hours committed to that of traditional graduate level work. The reading load is perhaps a bit more, in that in addition to the course assignments one must include all conference postings, which even with practice through techniques such as "skimming and skipping" (n. b. Hülsmann in this volume) can be time consuming to keep up with for active classes. As text-based replies by their nature require greater amounts of time to prepare, this too adds to students' workloads. On average, however, the program's general recommendation that students budget 10-15 hours per week per course appears to be sound. As an educator involved with the maintenance of my institution's accreditation, I am aware that the issues of appropriate levels of student achievement and equivalent quality of programs between face-to-face and online courses must always be kept in mind (Commission on Colleges of the Southern Association of Colleges and Schools, 2000).

4. Observations

In addition to the experiences described above, several observations might be offered regarding the program. First, online courses must be carefully constructed and instruction and directions extremely clear in order to avoid confusion and anxiety on the part of students. For example, something as simple as a deadline or appointment for an online chat must be carefully explained, taking into account time zone differences, Daylight Savings Time which may or may not be in effect, potential technical difficulties, etc. Instructors must take great care to reduce to a minimum discrepancies between course materials; in some cases, instructors would provide a syllabus and a general outline as well as an additional detailed course outline that were not in agreement with one another. Any possibility for confusion should be considered, as well as potentially vague or idiomatic language that might prove troublesome to students whose primary language is not English. In short, if anything can possibly cause confusion for students, it will; the goal should simply be to reduce this as much as possible.

Second, in response to criticisms by some, CMC in online courses is indeed capable of producing high quality, meaningful discourse between faculty and students (n. b. Hülsmann and Peters in this volume). For example, Clifford Stoll (1995), a famous critic of DE, has argued that "superficial network interactions don't carry the same risks as face-to-face conversations do. At the same time, they lack depth, commitment, and ordinary etiquette" (pp. 23-24). He further argues that as computers transmit data at higher and higher rates of speed, people have come to feel a sense of urgency to respond as quickly as possible, constructing their posts/e-mails with little reflection and proof-reading. People online, he argues, feel freed from many of the social constraints on behavior found in face-to-face communications, and they are more likely to respond emotionally, i.e. callously or rudely. One might challenge this argument with the observation that social context appears to be an influence online just as it is off-line, a situation that apparently was demonstrated by research conducted by Nipper (1989) that revealed different modes of communication between "home-based" and "company-based" learners.

Stoll's criticisms have not been experienced by this student in the MDE program to any significant degree. Instructors have provided clear instruction and expectations for students in terms of their postings (writing in a scholarly manner, often requiring references, with courtesy being the rule) (n. b. Harasim, 1996); at the same time, the majority of students do not appear to even need these reminders. Politeness is the norm, perhaps even to an extreme; at times I have strongly suspected that some students are reluctant to challenge the statements and opinions of classmates for fear of appearing confrontational (. B. Hülsmann in this volume). Of course, this is certainly also a problem in face-to-face environments, but in comparison I would argue that overall this has been less so online, with "group think" probably being less frequent as well .

CMC offers several advantages in that it gives learners time to compose their responses, offers them control over when to respond, enhances valuable literacy skills, and does not penalize those for whom the text language is not their first language (Harasim, 1996; Haughey & Anderson, 1998). I have been impressed by the quality of student postings, which are very often thoughtful, carefully written and considered, and frequently insightful (n. b. Harrison & Stephen, 1996). I have greatly enjoyed and benefited from synchronous and asynchronous CMC with my peers just as I have with my instructors and guest lecturers. Furthermore, it is abundantly clear that our classes are not simply "cookie cutter" courseware but that they are led quite visibly by individuals: students in the program have expressed on many occasions the very different experiences they have received from their instructors and guest lecturers, all of whom have exhibited a particular "style" in their feedback, oversight, and communications via CMC (n. b. Beaudoin in this volume).

Stoll (1995) further argues that the computer itself is a barrier to close teaching relationships in that it reduces face-to-face communications which serve a variety of functions (academic socialization, mentor-mentee development, role modeling, etc.). Only time will tell as to whether or not his naysaying is born out, but this author can report that he has personally benefited from the role modeling of his instructors as well as their encouragement throughout my studies. Additionally, research and publication opportunities have been offered to students, and I can only predict that these will increase as the program matures and closer relationships form between instructors and students (and graduates).

A third observation that might be offered is directly related to the above two and my previously described experiences: if Moore's theory of transactional distance (Moore, 1993) is applied to the MDE program, it could be argued that overall the program offers a fairly moderate level of transactional distance. Moore's first constitutive concept, *dialogue*, was given priority in his list and is well represented in the program as I have described above. While traditional education neglects or often disdains dialogue in favor of monological presentational methods (Peters, 1998), distance education must pedagogically embrace dialogue as a higher form of learning and teaching where students may learn to argue purposefully and in the language of their discipline; to support, analyze, or discard their own theoretical views; to evaluate critically and inquire into knowledge presented by other students; reflect critically and self-confidently on the knowledge they have gained and the methods used; as well as a host of other skills (Peters, 1998, p. 36-37). These skills cannot be instilled in students merely through printed DE units (Peters, 1998, p. 37), a position many researchers (Chen & Willits, 1998; Holmberg, 1995; Peters, 1998) support.

The highly interactive nature of CMC facilitates the development of these skills, allowing for less *structure* to be imposed. As mentioned earlier, the program imposes a certain degree of structure upon its students while simultaneously allowing students to steer their studies towards personal objectives through the selection of projects and assignments, elective courses, and to a large degree their participation in the conferences (n. b. Harasim, 1996; Harrison & Stephen, 1996), creating an environment that encourages the development of greater levels of *autonomy* in its students (n. b. Peters in this volume; Haughey & Anderson, 1998). Saba (1990) discusses the concept of *virtual proximity*, which describes the high degree of closeness that might be simulated by the use of new integrated telecommunications technologies. He explains that both dialogue and structure may be optimized through the use of virtual proximity, and he sees a *cybernetic relationship* between the two concepts, where through a control loop both are continually adjusted. This has been demonstrated throughout the program, where feedback is aggressively sought and provided by instructors from and to students. It may be argued that the MDE program is demonstrating excellent progress towards becoming a model of virtual proximity in its learning environment.

Several observations may be made regarding students as well. Students in the program have tended to view other students as well as instructors in a very egalitarian manner (n.b. Day, Crump, & Rickly, 1996; Harasim, 1996; Harrison & Stephen, 1996; Haughey & Anderson, 1998). It is very common for students to address instructors and (to a lesser degree) visiting experts by their first name, dispensing with titles on the whole (students are always addressed by their first names as well). Instructors have accepted if not encouraged this. This is to be expected, of course, in a program that is predominantly composed of non-traditional, professional students. The "sage on the stage" model has been largely replaced by the "guide on the side" model, a method which has proven very popular with students (and who have voiced dissent on those occasion when they felt it was not being demonstrated).

Of course, papers and projects are assigned and deadlines given as in traditional courses, and it has been this author's experience that students in general comply with these structures as is normally expected. Where dissent has arisen, however, is in the area of required conference participation. A vocal minority of students have periodically criticized these requirements, arguing for greater autonomy and/or the value of "witness

learning" (n. b. Beaudoin, Hülsmann and Peters in this volume; Rourke, Anderson, Garrison, & Archer, 2001). Although student learning certainly takes place outside of required papers, projects, and public participation, it can be argued that a moderate level of CMC participation substantially improves the overall quality of the DE learning experience, a position taken by many researchers (Harasim, 1996; Harrison & Stephen, 1996; Haughey & Anderson, 1998; Peters, 1998 (see above); n. b. Beaudoin, Hülsmann and Peters in this volume).

5. Applications

Throughout my coursework, many students have reported that the training they have received and the literature they have been exposed to have led to immediate applications in their professional lives. Harasim (1996) discusses this aspect of online learning, describing the linkages it creates between school and work and that online courses help to dissolve the dichotomy between theory and practice, increasing the continuity between learning and professional life. In reviewing my own situation, I can report that I have effectively utilize these experiences in student support, instruction, and administration at my educational institution.

With regards to student support and instruction, I have begun coordinating and developing online materials and services to support learning and advisement for my department in response to the desire from both faculty and students for more flexible learning and student services. We have converted all print advisement materials to Web-based versions, creating FAQ's, and all handbooks and forms are now available as downloadable PDF files. All instructors are now being encouraged (and supported) to make their syllabi, notes, and other handouts available online, as well as to incorporate CMC into their course structure. This has resulted in the growing use of conference boards, chat, and instant messaging, with a small but growing number of instructors blending their online and face-to-face classes in the use of these resources.

I have also been tasked by my chair to begin directly supporting our online instructional efforts by assisting instructors in the development of Web-based materials and reviewing student surveys in an attempt to identify and address potential problems. At my suggestion and following a growing business practice, our department has also implemented a Java chat service that allows visitors to our Web pages to chat with our student adviser as they view our online materials. This service has proven to be popular, allowing students (and the college) to save on long-distance phone calls as well as providing more inviting and timely support to our students (who have used the service to contact our office from as far away as Africa, Europe, and Asia). A further project I have taken on for myself is the creation of a directory of Web resources for our programs, collecting those already being used by our faculty and other sites of note to facilitate the incorporation of Web-based information and research into their lessons.

In terms of administration, I have been able to utilize resources and information obtained through my courses to advise my department chair regarding our participation in online credit courses in such areas as scheduling, cost-benefit analysis, and long-term planning. I have been able to provide assistance to the college's Academic Technologies department, which supports and coordinates college-wide DE efforts, by offering DE resources on topics such as copyrights and intellectual property, economics of DE, ICT,

etc. I have also been tasked by my chair to develop Web-based versions of our departmental handbook and to create a hypertext adjunct faculty handbook. Additionally, I have been able to lobby successfully for the requirement that all new faculty in our department possess a minimum level of skill in ICT to support the growing demand for Web-based and distributed learning.

6. Conclusions

The MDE program has provided both theoretical and applications-oriented approaches to the study of DE. Its creators and instructors have developed a supportive and challenging environment while also meeting the needs of students seeking greater levels of autonomy and flexibility in their studies. However, the exercise of periodically reviewing any endeavor provides opportunities for objective assessment of both its status and methodology, activities which of course are of benefit to a young program such as the MDE. Economic considerations are of obvious interest, perhaps more so in the current climate of ever-tightening budgets, anticipated and unanticipated revenue shortfalls, and rising costs and increasing enrollments. Educational objectives must be reviewed as well. Additionally, the program (and university) should review whether or not tuition and fee rates are too high or technical requirements prohibitive. It is generally the practice among dual mode institutions (those that provide both face-to-face instruction and DE) in the U.S. that out-state students pay triple the normal tuition and fees, with the rationale being that the student and/or his or her family have not paid any taxes required for the establishment and maintenance of the educational institution – in other words, they have not paid for their “fair share”. This is the policy of UMUC as well. Many educators and some politicians, however, have begun challenging this, arguing that DE by its nature expends and requires fewer resources in terms of physical infrastructure as well, etc. As a result, the idea of an “e-rate” for online courses, where tuition would fall somewhere between in-state and out-of-state, is now being advocated by some (n. b. Carneval, 2002). Michael Moore (Shin, 2000), worried that technology and money are driving the distance education movement (at least in the U.S.), states:

"It seems that this mission [of DE] to reduce inequality does not pre-occupy many of the newer providers – who regard on-line distance education as a consumer commodity. It can be bought, if one has the purchasing power, but is inaccessible otherwise. Not only is distance education no longer able to achieve its traditional goal of narrowing the gap between those with greater knowledge and those who have less, but in the on-line era may even contribute to widening it." (Shin, 2000)

Other questions should be asked as well. Is there sufficient diversity in its student body and faculty with regards to background, nationality, and ethnicity? Has the program achieved success in regards to retention and completion rates? Could the program benefit from the establishment of a system of TA's and/or mentors? Should testing (i. e. GRE) requirements be implemented? And additionally, has the program been successful in helping its graduates find positions and advancement in the field?

In the fast-changing discipline of DE, which is heavily influenced by the even more rapidly changing field of ICT, the temptation might be to incorporate or embrace innovations as they become available. Bates (2000), however, reminds us that "technology is, by definition, a means to an end, not an end in itself" (p. 45), a sentiment

echoed by Holmberg (2000) who adds, "It is not our task to propagate technology but to help students to learn." Bates' (2000) ACTIONS model provides a useful guide for researching and evaluating new technologies from all perspectives, including those of both the educational institution and its students. The administrators and instructors of the MDE program (and UMUC as a whole) have demonstrated restraint and careful consideration before implementing new modes of ICT, soliciting feedback from students on many occasions. Generally speaking, many students have voiced concerns over the mandated use of synchronous communications (chat, instant messaging, phone conferencing), pointing out that time zone differences pose difficulties, overseas connection charges may be incurred for phone conferencing, and that the use of these technologies violates the ideal of "anytime/anywhere." As a result of these dialogues, to date synchronous communication has been utilized sparingly in my experience, although it remains an option open to students to use at their discretion, a compromise that appears to be acceptable to the majority. Regarding such issues, Moore and Kearsley (1996) offer the following sage advice: "what matters eventually is not so much what media are employed, but *how* they are actually used" (p. 98). Thus, while the MDE program offers much to students in the way of innovation, a certain degree of conservatism has served to avoid some potential pitfalls of online DE.

References:

- Bates, A. W. (2000). *Managing technological change: Strategies for college and university leaders*. San Francisco: Jossey-Bass Inc.
- Carnevale, D. (2002). Southern states ignore proposed 'e-rate' for distance-course tuition. *Chronicle of Higher Education* (online). Retrieved April 4, 2002, from <http://chronicle.com/free/2002/03/2002032501u.htm>
- Chen, Y., & Willits, F. (1998). A path analysis of the concept of Moore's theory of transactional distance in a videoconferencing learning environment. *Journal of Distance Education/ Revue de l'enseignement à distance*, 13 (2). Retrieved March 26, 2001, from <http://cade.athabasca.ca/vol13.2/chen.html>
- Commission on Colleges of the Southern Association of Colleges and Schools (2000).4.1 General requirements of the educational program. In Southern Association of Colleges and Schools, *Criteria for accreditation: Commission on colleges*. Decatur, Georgia.
- Day, M., Crump, E., & Rickly, R. (1996). Creating a virtual academic community: Scholarship and community in wide-area multiple-user synchronous discussions. In T. Harrison & T. Stephen (Eds.), *Computer networking and scholarly communication in the twenty-first century university* (pp. 291-311). New York: State University of New York Press.
- Harasim, L. (1996). Online education: The future. In T. Harrison & T. Stephen (Eds.), *Computer networking and scholarly communication in the twenty-first century university* (pp. 203-214). New York: State University of New York Press.
- Harrison, T., & Stephen, T. (1996). Computer networking, communication, and scholarship. In T. Harrison & T. Stephen (Eds.), *Computer networking and*

scholarly communication in the twenty-first century university (pp. 3-36). New York: State University of New York Press.

- Haughey, M., & Anderson, T. (1998). *Networked learning: The pedagogy of the internet*. Montreal, QC: Cheneliere/McGraw-Hill.
- Holmberg, B. (1995). *Theory and practice of distance education* (2nd edn.). New York: Routledge.
- Holmberg, B. (2000). University of Maryland University College, OMDE601.9040 Foundations of Distance Education course, online conference.
- Jones, C. (2001). Out of a cracker jack box? As online degrees start showing up on people's resumes, what will the business world think of them? *Online Learning Magazine*, April 2001. Retrieved April 3, 2001 from: <http://www.ittrain.com/new/apr01/printer/feat4prt.htm>
- Khan, A. (2001). *The future of learning - learning for the future: Shaping the transition*, Keynote address in the plenary session on Monday, April 2, 2001 at the 20th ICDE Conference on Open Learning and Distance Education. Retrieved November 25, 2001 from http://www.fernuni-hagen.de/ICDE/D-2001/final/keynote_speeches/monday/khan_keynote.pdf
- Latchem, C., & Hanna, D. (2001). *Leadership for 21st century learning: Global perspectives from educational innovators*. London: Kogan Page Limited.
- Mason, R. (1998). *Globalising education: Trends and applications*. London: Routledge.
- Moore, M. G. (1993). Theory of Transactional Distance. In D. Keegan (Ed.), *Theoretical principles of distance education* (pp. 22-38). London: Routledge.
- Moore, M. G., & Kearsley, G. (1996). *Distance education: A systems view*. Belmont, CA: Wadsworth Publishing Co.
- Nipper, S. (1989). Third generation distance learning and computer conferencing. In R. Mason & A. Kaye (Eds.), *Mindweave: Communication, computers and distance education*, (pp. 63-73). Aarhus, Denmark: Aarhus Technical College and DEUS Consortium. Retrieved February 7, 2001, from: http://umuc.blackboard.com/courses/1/OMDE603/content/_286_1/nipper_chap5.html
- Peters, O. (1998). *Learning and teaching in distance education: Analyses and interpretations from an international perspective*, Sterling, VA: Stylus Publishing, Inc.
- Rourke, L., Anderson, T., Garrison, D.R., & Archer, W. (2001). Assessing social presence in asynchronous text-based computer conferencing. *Journal of Distance Education/Revue de l'enseignement à distance*, 14(2). Retrieved February 12, 2002, from: http://cade.athabasca.ca/vol14.2/rourke_et_al.html
- Rumble, G. (2001). *E-education: Whose benefits, whose costs?* Inaugural lecture presented to the U.K.O.U., February 28, 2001. Retrieved July 1, 2001 from: <http://www.uni-oldenburg.de/zef/cde/econ/readings/rumbl01b.pdf>
- Saba, F. (1990). Integrated telecommunication systems and instructional transaction. In M. G. Moore (Ed.), *Contemporary issues in American distance education*. Oxford: Pergamon.

- Shin, N. (2000). An interview with Michael Moore: A Pioneer in the field of distance education. *Distance-Educator.com*. Retrieved September 19, 2000 from: <http://www.distance-educator.com/moore/template.html>
- Stoll, C. (1995). *Silicon snake oil: Second thoughts on the information highway*. New York: Doubleday.
- Suguri, V., Matos, L., Castro, N., Castro, I., Jung, L., & Rusten, E. (2002). Pedagogical uses of Web-based chat: A pilot activity in Brazil. *TechKnowLogia*, January - March 2002. Retrieved February 1, 2002 from: http://www.techknowlogia.org/TKL_active_pages2/CurrentArticles/main.asp?IssueNumber=15&FileType=HTML&ArticleID=365