

Theories of Distance Education Meet Theories of Mediated (Mass) Communication

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INTRODUCTION

Distance learning for higher education has its advocates (Pittinsky, 2003) and its detractors (Noble, 2003). Researchers, drawing primarily on psychological and educational research literatures, make impassioned arguments for and against institutionalizing distance learning. Undoubtedly, with increasingly rapid technological developments including hand-held, network, and personal hardware capable of processing huge amounts of data, and

advances in creating virtual classrooms, the allure of delivering quality education cheaply and widely has attracted attention of educators, policymakers, corporate boards, and end-users.

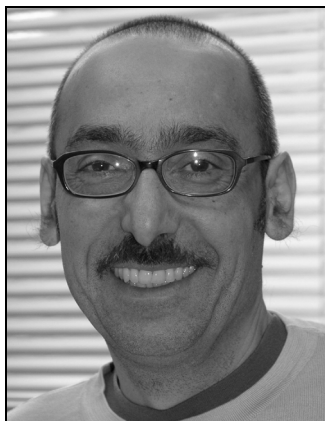
However, the implications of the models and theories of mediated communication that should inform the debate regarding distance education seem to have attracted little attention. This article describes the two dominant models of mediated (and mass) communication: an information theory/source-receiver model and a cultural, structuralist model. The mainstream conversation in education disciplines about distance learning presupposes an information theory/source-receiver model of communication. I discuss the origins and parameters of information theory/source-receiver communication models and describe how mainstream distance education theories presuppose this model. Next, I examine structural and cultural models of communication and suggest the role those models may play in developing efficacious ways in which to evaluate whether and when distance learning can best be implemented. My major thesis is that distance education scholarship must clarify its theoretical underpinnings if research findings are to

be of use in making decisions of any sort about distance learning.

THEORIES OF MEDIATED/ MASS COMMUNICATION

In the post-World War II period, the dominant models offered by U.S. mass media researchers extended the linear effects model as proposed by early twentieth century researchers. The post-World War I generation of American scholars comprised a cohort that had fled the dire conditions in inter-war Europe. They were keenly aware that mass communication could be used to appeal to and to organize recently urbanized proletariat. Post-World War II researchers, living in a time of relative prosperity, argued that media effects would be tempered by variables that earlier scholars, in their reaction to fascism's mastery of mass communication, had neglected. Once scholars built in feedback loops or focused on audience choice, the huge direct effects model was challenged.

Be that as it may, common among most effects researchers remained the notion that mass communication is exemplified by a formula: a source produces messages that are in turn interpreted by audience members. Communication in



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this formulation is “a process in which a source encodes and then transmits a message along a channel. This is received and decoded at its destination upon which it produces an effect.” (O’Sullivan, Hartely, Saunders, Montgomery, & Fiske, 1994, p. 51). Among the assumptions of this model is that the channel (one site at which researchers can examine the process) will more or less efficiently transmit/transfer a message (content, another area for researchers to explore) that can be clearly and cleanly decoded by an audience (a third area of focus).

As effects researchers increasingly studied mass communication from the audience site, there seemed to be fewer effects that could be attributed to mass communication. Audiences were only idiosyncratically attentive to the intended meanings of messages (content) and sometimes highly erratic in terms of their attention to the media (producers) altogether. For example, the “uses and gratifications” approach to audience research asserts that the audience member’s attentiveness is strictly “motivated and directed toward the gratification of certain individually experienced needs” (O’Sullivan et al., 1994, p. 325). What kinds of gratification can distance learning create for its communities? This question points to a research agenda with potential relevance for the field of distance education; however, it would require knowledge of mass communication research literature.

Concomitant with postwar peace was the emergence of new nations from the ruins of European empires. International mass communication scholars adapted general theories of mass communication to suggest that mass media could play a significant role in the modernization and development of nations around the world: on the

African continent, in Asia, and elsewhere.

When the United Nations proclaimed the 1960s the decade of development, two eminent researchers, Daniel Lerner and Wilbur Schramm, had independently associated increased exposure to mass media with accelerated rates of development in traditional societies. Schramm endorsed Lerner’s assertion that exposure to new communication technologies is highly correlated with a decline in fatalism and reliance on traditional authority and a concomitant rise of economic development indicators and political participation leading to development and democracy. Schramm went even further, suggesting that “the task of the mass media of information and the new media of education is to speed the long, slow social transformation required for ... development” (Thussu, 2002, p. 57).

Following the lead of Lerner and Schramm, mass communication scholar Everett Rogers highlighted the role of mediated communication in his work on the *Diffusion of Innovations* (Rogers, 1995). He advanced a top-down model of communication in which innovations in education as well as other social practices, such as agricultural and governmental arrangements, are dependent on rising levels of media penetration and the identification of indigenous elites (innovators) to lead the economic, political, and social changes that are part and parcel of national development. Each of these researchers (Schramm, Lerner, and Rogers) thought of new media as neutral objects through which messages passed from producers to audiences. They adapted the more general theories of mass communication that highlighted the impact or effects of media on an individual’s attitudes and behaviors to conduct research and recommend policies

for developing countries. Their policy recommendations were based most often on the findings of surveys conducted by “various US-government-funded agencies and educational foundations” (in particular, the data collected in Asia and Latin America) (Thussu, 2002, p. 57). As development policies were interpreted and implemented around the world, the shortcomings as well as the implicitly Western bias of those policies were noted. But, in any case, the Schramm-Lerner-Rogers scholarship implicitly and explicitly identified mass media as tools for education.

Reaction to U.S.-led development policies turned into doubts about the efficacy of following a Western (European and American) template of development. Criticism of the information theory or the effects model of mass communication was spearheaded by Third World intellectuals such as Paulo Freire. Third World scholars were able to observe and experience the pragmatic impact of the applications of dominant mass communication theories on development programs—including educational ones. Freire’s *Pedagogy of the Oppressed* (2000) proved highly influential, not only among Third World researchers but also worldwide. However despite the criticisms, mass communication media as tools for development and education were not simply rejected, nor were they seen a priori as tools of cultural imperialism. New theoretical approaches were proposed.

By the 1980s, an alternative paradigm had emerged in the field of mass media studies. Highlighting the differences of mass media as a form of production (i.e., different in kind from, for example, the production of cars) and recognizing ideology as itself a product (i.e., produced and reproduced), the new paradigm constituted a major break with traditional mass commu-

nication research. The structural ways in which race, class, gender, and nationality (among other variables) are inscribed as power relations were returned to the analytical tool kit of researchers. Concepts that held sway in mainstream research were questioned (for example, the notion that traditional and modern are bipolar opposites) or undermined (for example, denoting a nation as developing or developed), and other concepts were introduced (for example, using the concepts of center and periphery). No longer could technology and infrastructure be regarded as neutral; to the contrary, they were understood as the products of a specific historical moment inscribed with its politics, economics, and social and cultural specificities.

American mass media and communication scholarship is still dominated by the source-receiver model. The research focuses on the functionality of communication, assumptions which elide the problematics of who defines functionality; it tends to overemphasize consensus and veers away from accounts of conflict and change. And yet, especially among American media researchers concerned with global issues, and among European, U.K., and Latin American scholars, structural and cultural approaches provide relevant alternatives. One example of this different approach is the work of American cultural studies, which exemplifies the constructivist paradigm and which also highlights consensus-building through communication ritual (as opposed to the source-message-receiver model).

Research using structuralist/post-structuralist analysis focuses primarily on how social divisions are made meaningful and in particular on the hegemonic role of mass media and communication. It recognizes that the key organizing concepts such as class, race, and gender

are historical realities and as such are always integral to research. Mass media technologies and infrastructures are interrogated rather than taken for granted. "The aim was to understand how culture (the social production of sense and consciousness) should be specified in itself and in relation to economics (production) and politics (social relations)" (O'Sullivan et al., 1994, p. 72). Furthermore, this model highlights the institutional and industrial conditions of ownership and production.

As the insistence on historically-specific media research that embraces the role of ideology suggests, cultural and structural media/mass communication research is overtly concerned with social justice and is purposefully engaged with social transformation. The concerns, the politics of the research, stand in contrast to the social scientific voice as removed, impartial, and objective. The perspective of cultural studies researchers overtly originates within the researched. That the scholars may then propose a radical transformation of current media practice, suggesting this alternative would be the site of a twenty-first century public sphere (i.e., "open and accessible to all ... [and therefore] ... a key component of modern, participatory, democratic life") is as much to say that an emerging social model must be tied to any progressive human endeavor, including distance learning (O'Sullivan et al., 1994, p. 251).

DISTANCE LEARNING: DEFINITIONS AND MODELS

In 1986, Desmond Keegan categorized theories of distance learning into three areas: theories of autonomy and independence (major contributors Charles Wedemeyer and Michael G. Moore), theory of indus-

trialization (dominated by the work of Otto Peters), and theories of interaction and communication (major contributors Börje Holmberg and John Bääth). Garrison and Shale's model of distance education also seems to fit into category I of Keegan's chart, since their model is "focus[ed] on the functional basis of education first by placing the teaching and learning transaction at the core of distance education practice" (Garrison & Archer, 2000, p. 9). Keegan's categories do not delineate a linear progression in the advancement of theories of distance learning. Categories are grouped according to their main concepts. For example, Wedemeyer's work was developed during the 1960s and 1970s, and Moore's in the late 1970s and 1980s. However, in both cases, the emphasis is on learner independence and they are grouped together. Thus, it is quite possible to chart an intellectual narrative of definitions and models of distance learning and to infer theory or theories.

Keegan (1980) identified six dimensions of distance learning: separation between teacher and student; influence of an educational organization; use of media to connect teacher and student; two-way exchange of education; students perceived as individuals, not as groups; education as a form of industrialization (Gunawardena & McIsaac, 2004). Over the past 25 years some of those categories may seem obsolete. For example, the concept of students perceived as individuals (rather than as group) may no longer be relevant for distinguishing distance from face-to-face education. It can be argued that group work is easily accommodated into the most current technologies. "[T]he quasi-permanent absence of learning groups ... need no longer apply. Groups of learners can cooperate although being geographically separated" (Holmberg, 2003, p. 80).

However, caution is advised in too quickly adapting theory to current technological developments or, for that matter, current pedagogical practice. Keegan's categories may still be suggestive as in the example of individual versus group orientation; the individuals and/or groups may be placed differently in space and/or time.

These six dimensions emerged from the period in which distance learning was closely and positively linked with issues of economic, political, and national development, especially by American teachers and scholars. However, by the latter 1970s, enthusiasms were replaced first by doubt and then sometimes by despair, as it became clear that even in highly developed countries such as the United States, Great Britain, and in other European countries, access to higher education was skewed away from rural areas and disadvantaged or marginalized populations, whether rural or urban. In the so-called Third World or developing countries, the term *peripheral* came to express access to education as well as participation in the global economy. Also, it was increasingly recognized that development was not always a national-level variable. Access to higher education through distance learning might penetrate to urbanized areas, where it was accessed primarily by developing nations' elites.

During the 1980s, and with the concomitant rapid expansion of communication technologies into everyday life, the appeal of distance learning received a new lease on life. It came to be seen not as simply a tool for reaching underdeveloped areas and peoples, but as part of the mainstream in higher education and in the corporate environment. For example, Charles Wedemeyer, as a leading proponent of distance learning, emphasized the individual freedoms that, he believed, distance learning confers. He

advanced the argument that distance learning and newer technologies confer equal access, personal independence, and autonomy. Similarly, Wedemeyer's model proposes that a democracy of education for all people regardless of their gender, age, nationality, class, and place is the logical outcome of distance learning (Moore, 1991). Wedemeyer's approach assumes that teaching and learning are the prime movers of distance education; thus, he focuses on the pedagogical possibilities. However, Wedemeyer seems to ignore important structural components such as power and political economy.

Michael Moore rethinks the concept of distance, arguing that distance should be theorized as a multidimensional concept. He suggests that among these dimensions and, contrary to previous work, geographical distance is not the most important. Using the term "transactional distance," he proposes two major concepts within his theory of learning: structure and dialog. Moore defined structure as "a measure of an educational program's responsiveness to learners' individual needs" (Moore, as cited in Faust, 2004, Background section, para. 2). He defined dialog as "the extent to which, in any educational program, learner and educator are able to respond to each other" (Moore, as cited in Faust, 2004, Background section, para. 2). Put another way, structure refers to the design of the instructional program, while dialog refers to interaction through communication of the learner and the educator. In sum, Moore shifted the debate concerning distance learning by pushing it into the arena of pedagogical differences.

For Garrison and Shale, educational issues are the fundamental issues in the theory of distance education, regardless of separation of teacher and students. They attempt

"to focus on the functional basis of education first by placing teaching and learning transaction at the core of distance education practice" (Garrison, 2000, p. 9). Garrison added the concept of "responsibility and control" into the theory of transactional learning. Control and responsibility give students a chance to shape their own educational outcome. "As students' knowledge and abilities develop, they can assume increased responsibility and control. Responsibility and control together will encourage students to assume ownership of their learning and education" (Garrison & Archer, 2000, p. 14)

In their most recent efforts, Garrison, Anderson, and Archer (2003) cite the differences of distance learning from face-to-face education by noting what they refer to as its new and powerful feature: the ability to "conduct collaborative learning regardless of time and place" (p. 113). This allows for a true "creat[ion of] a community of inquiry" based on three essential elements: "social presence, cognitive presence, and teaching presence" (p. 115). This "community of inquiry model," should, according to these authors, help provide the much-needed theoretical/research guidelines or parameters for the applications and practice of distance learning. As they noted, "The problem of the field of distance education is that we do not have the theoretical models and research to guide its practical application and fully imagine its potential and impact" (p. 124).

Exemplifying the category "theory of industrialization" is the work of Otto Peters (1983). Peters advanced a typology of difference, arguing that "distance education is quite distinct from traditional face-to-face education, and that it is different because it results from the 'industrialization' of teaching and learning" (Connell, 1998). For

Peters, the “objectification of the teaching process” is a result of the industrialization of distance learning. Distance education has shifted away from interpersonal communication, which is at the heart of the face-to-face education, to the “objectified, rationalized and technologically produced interaction” (Connell, 1998). Peters, drawing on Jurgen Habermas’ (1971) conceptual differentiations between types of communication (i.e., “symbolically mediated interactions” [=traditional teaching] and “rational acting” [=distance learning]), proposed that distance learning generates human interactions that, in common with other industrial forms, are “objectivized, rationalized and technologically” functional (Connell, 1998).

Peters’ work points to a general characteristic of the new form of teaching and learning, and it illuminates structural peculiarities and distinctions, and thus separates it sharply from all conventional forms of face-to-face instruction (Keegan, 1994). Traditional teaching, relying on face-to-face communication, generates relational communication. Peters’ typology demonstrates that these two approaches differ at every level from the most fundamental assumptions about the roles of education and teaching and the impact of mediated and interpersonal communication, to the standards by which success can be measured. In particular, he highlights how communication is central to any consideration or comparison of educational approaches. Therefore, theories of communication are recognized as of primary relevance to theories and practices of education.

Peters (2003) emphasizes the importance of new information and communication media that brought digitalization into our daily lives and educational institutions. He asserts that there are historically dis-

tinct phases of distance education, and each phase has a unique form of teaching and learning behavior. The first generation of distance learning used the book as its main medium (over 100 years). The second generation, beginning in about 1970, retained the textbook and added the use of radio and television. The third (and current) generation is dominated by digitalization. It is characterized by the integration of multimedia technologies and the personal computer (PC). “The PC serves at the same time as a carrier, distribution, display, instruction, and interactive medium. In addition, it provides pedagogically useful services that traditional media are completely unable to do” (p. 88). The new media powerfully combine networks, and use servers, search engines, and expert systems. “This configuration integrates the new media, allowing the digital learning environment not only to determine the structure of the learning process but to reconstitute it” (p. 89).

The next category of distance education theories in Keegan’s typology is theories of interaction and communication, of which Holmberg’s research is an exemplification. The heart of Holmberg’s distance theory is the concept of “Guided didactic conversation,” which, he argues, is a “pervasive characteristic of distance education” (Garrison, 2000, p. 8).

“Guided didactic conversation ... refer[s] to both real and simulated conversations, although the reliance is upon simulated conversation. As such the emphasis is very much on the content and conversational character of written pre-produced course package” (Garrison, 2000, p. 7). Holmberg himself came to regret his adoption of the term “guided didactic conversation”; he felt it was misunderstood, perceived as referring to a totalitarian approach to

distance education. As Holmberg noted:

Further, I used a somewhat unfortunate terminology. I referred to the conversational character of distance education as *didactic*, an adjective in many cases taken to indicate an authoritarian approach (the opposite of what was meant). Instead of *guided didactic conversation*, I now prefer the term *teaching-learning conversation*. (Holmberg, 2003, p. 79)

In any case, Holmberg’s theory is an attempt to introduce and link the notions that teaching and communication are equally vital areas of concern when conducting research about the efficacy of distance education. However, despite Holmberg’s revisions to his original formulation, his work has not yet been embraced by the field. For example, this comment is not atypical: “[W]hile Holmberg makes a great effort to place teaching at the core of his theory, his own structural assumptions and the central role of self-study learning packages limit teaching to one-way communication” (Garrison, 2000, p. 8).

DISCUSSION AND CONCLUSIONS

Every serious educator is aware of the importance of theory in teaching, learning, and research. Theory teaches us what we know. Theory also tells us what we do not know and guides us in our research. Theory points to where/how research can further advance a discipline, a professional practice, and public policy. As Moore (1991) noted, “research that is not grounded in theory is wasteful” (p. 2). Additionally, teaching (practicing) that is not grounded in theory is also wasteful. Practicing a theory can be a conscious and/or unconscious behavior. This article questions whether

staying within the boundaries of distance learning theory in teaching, learning, and research is sufficient to understand this aspect of educational practice. My contention is that attempting to explicate a theory of distance education without including theories of mediated communications is futile.

It is vital to realize that communication is an integral part of distance education. It follows that mass communication theories are as relevant as theories of education to understanding distance education. This project delineates two models of communication. One developed from information theory, the other from structuralism generally and critical cultural studies specifically. Education researchers, sometimes unknowingly, rely on models of communication that highlight processes and overvalue efficiency. Of the research outlined, only Peters' work seems to consider structural and critical cultural variables.

An important conclusion of my argument is that a structural and critical cultural theory of communication is a better alternative because it allows insights into communication as a process of negotiation and exchange of meanings that occur within the external economic and social formation (the context and lived experiences within which learning occurs). This model insists that agency cannot be limited to the source, message, and receiver, and that communication must be understood as the process of making meaning within structures of power and ideology. Once adopted, this model will in turn allow researchers

to ask better questions that focus attention on what Peters calls the advantages of traditional teaching: emancipation and extension of dominance-free communication rather than simply an increase of the effectiveness of teaching system and geographical reach.

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"IT FOLLOWS THAT MASS COMMUNICATION THEORIES ARE AS RELEVANT AS THEORIES OF EDUCATION TO UNDERSTANDING DISTANCE EDUCATION."

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