DOCUMENT RESUME

ED 427 347 CS 509 958

AUTHOR Jacobs, Richard M.
TITLE Road Maps To Understand School Communication.
PUB DATE 1993-00-00
NOTE 33p.
PUB TYPE Opinion Papers (120) -- Reports - General (140)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Classroom Communication; *Communication Problems; Communication Research; Communication Skills; Elementary Secondary Education; *Interpersonal Communication; School Role; *Student School Relationship; *Teacher Role
IDENTIFIERS Communication Strategies; Communication Styles

ABSTRACT

The most prevalent variable manifesting itself in schools is communication or, at least, it seems to be a most pervasive variable. What is communication? In what ways do humans communicate in schools? And how might the concept "school communication" be defined? To investigate possible ways to respond to these and other such questions, this paper presents five road maps in order to describe and better understand the concept "school communication." Each road map introduces an important perspective illuminating the discipline of communication. It is the combination of these five road maps, a "communication atlas," which provides an introduction to this discipline and how it facilitates understanding the important educational variable, school communication. The names of the five road maps are: (1) the cause-effect cluster; (2) the psychological cluster; (3) the interactive cluster; (4) the pragmatic cluster; and (5) the semiotic cluster. (Contains 2 figures and 33 references.) (Author/CR)

Road Maps to Understand School Communication

Richard M. Jacobs
Villanova University

Abstract

The most prevalent variable manifesting itself in schools is communication or, at least, it seems to be a most pervasive variable. What is communication? In what ways do humans communicate in schools? And: How might the concept "school communication" be defined? To investigate possible ways to respond to these and other such questions, this article presents five road maps in order to describe and better understand the concept "school communication." Each road map introduces an important perspective illuminating the discipline of communication. It is the combination of these five road maps, a "communication atlas," which provides an introduction to this discipline and how it facilitates understanding the important educational variable, school communication.

Charting the Itinerary

There is little doubt about it: communication is an important variable in organizational life (Simon, 1957). And, it is at the heart of most organizational problems, or so it appears. Lysaught (1984), for example, has noted that "problems of language, and meaning, and their transmission are among [administrators] most important, persistent, and ubiquitous organizational difficulties. More frequently than not, failures in communication lie at the heart of problems in organization, goal-setting, productivity, and evaluation" (p. 102).

In the past two decades, school improvement initiatives have focused upon many variables, for example, to empower teachers through site based management and to improve learning through outcomes based assessment. In contrast to these notions, important as they may be, Floyd and Jacobs (1992) suggested that the most prevalent variable manifesting itself in educational organizations is communication. For them, school communication is the all-pervasive educational variable at the heart of educational reform. Additionally, Jacobs (1992) has argued that everyone involved in schooling communicates and that understanding school communication might enable educational leaders to bridge the chasm frequently separating theory from practice. He has also predicted that this conception would provide a vehicle which would enable educators to initiate reforms in American schooling where he believes it counts most: in the classroom. At a minimum, this examination of the discipline of communication has broadened the way educators might understand school communication.

All of that seems simple enough. Unfortunately, the more people attempt to describe and understand communication, the more slippery this concept becomes. For two theorists, communication is a concept so overloaded with meaning that it has become, for all practical

purposes, an "overburdened concept" (Dance & Larson, 1976). People simply expect too much of this important concept.

To frame this embryonic discussion about school communication, we might begin by asking some questions. What is communication? In what ways do humans communicate in schools? And: How might the concept "school communication" be defined?

This article responds in a preliminary way to these important questions. First, F.E.X. Dance's description of communication is summarized. By clustering disparate communication theories into five distinctive road maps, this article endeavors to make the phenomenon of school communication more comprehensible. Each road map applies one of Fisher's (1978) five perspectives to schools. And, while each road map charts a way educators can become more attentive to school communication, it is the collection of these road maps (a veritable "communication atlas") which provides the formal introduction to the discipline of communication and the variety of viewpoints theorists like B. Aubrey Fisher (1978) and Sarah Trenholm (1991, 1986) have used to provide an introduction to the language and concepts of this discipline. It just might be that this journey, replete with nettlesome curves, contours, and detours, can help educators to better understand what is certainly one of the most prevalent variables in schooling.

What is *school* communication?

Dance (1970) has attempted to unravel what he has termed an overburdened concept, "communication," and by so doing, has isolated some of its more predominant dimensions, especially those which theorists have used to describe this concept. Dance's lucid survey takes note of the conceptual obfuscation talk about communication harvests. For example, he has indicated that communication has been variously identified as a process, a response, and a

stimulus. As such, communication has been said to involve the use of symbols, understanding, interaction, and transference, all in order to transmit information with less confusion and uncertainty. Dance has also outlined how communication functions: it links individuals to the environment, establishes commonalty, exercises power, binds people in space and time, and replicates memories. He has noted, too, that communication can be used both intentionally and non-intentionally. But, how can we define communication? Dance himself has noted how slippery communication is; for him, communication is a concept that changes even as one tries to examine and define it (Dance, 1967).

With theorists politely disagreeing among themselves and not expressing unanimity about the concept of communication, Dance has forcefully suggested that communication be described as a "family of related concepts." He offered this approach recognizing that communication refers not to one, but to a collection of concepts which identify the process wherein human beings produce and exchange signs. It is this process, Dance has argued, that is unique to human beings and is the proper subject of the discipline of communication. Trenholm has developed Dance's notion further, suggesting that human communication is a unique system "because of our language- and code- making capacity and its application in social interaction" (Trenholm, 1986, 1991).

For our purposes, then, *school communication* might be defined tentatively as *that family of related concepts identifying the process transpiring in school organizations wherein human beings produce and exchange signs about personally and socially significant knowledge, skills, and values*. Figure 1 introduces this family of related concepts and provides a definition of school communication identifying the diverse conceptual approaches involved in describing this variable.

[INSERT FIGURE 1 HERE]

In Cusick's (1992) *The Educational System: Its Nature and Logic*, where he focused upon the interactions between students and students, students and teachers, teachers and teachers, teachers and administrators, as well as administrators and outside parties, he argues "that there are common and predictable elements that work within and across schools and within and across education's systems, which do not change even as times and people change. These stable and enduring elements...are the substance of the educational system" (p. xi).

Maybe school communication is the substance of the educational system Cusick has investigated and perhaps this communication atlas identifies those processes binding the educational system together. If school communication is the substance of the educational system, how does school communication take place? Would it be possible to "map" school communication if it involves the production and exchange of signs conveying personally and socially significant knowledge, skills, and values? In an effort to respond to questions like these, the following five road maps provide different avenues to trace this important educational variable. Not only does each road map highlight one way communication travels through schools, but each road map also introduces an important perspective of the discipline of communication. It is this discipline which might help educators to better understand school communication. Perhaps this might just be the most prevalent variable in schooling at all levels of the educational enterprise, from the primary grades through graduate school.

Road Map #1: The Cause-Effect Cluster

Were human beings omniscient, they could predict any outcome as long as they were aware of all relevant causal factors. But, since human beings are not omniscient, many of us spend time searching to discern relationships between outcomes and the forces we believe have caused these outcomes, sometimes tinkering around until we have discovered the sole force effecting an outcome. Then, once we discern the patterns we believe cause things to happen the way they do, we experience a sense of power and satisfaction, for we believe we have discovered how to explain the way things actually do occur. More importantly, however, we possess another power: we are also capable of communicating the reservoir of knowledge we have accrued.

The *cause-effect* road map uses this framework to describe the process of human communication. In the cause-effect framework, communication functions "like a link in a chain—each link connected to the next link and connected to other links only through the intervening links. Taken together all links form a complete chain" (Fisher, 1978, p. 102). To understand what comprises human communication, we must examine the individual links which comprise the communication chain. Further, we must also examine the way each link is connected to other links in the chain.

Trenholm (1978, pp. 32-33) has adapted the classical Shannon-Weaver (1949) model to portray these links. Her depiction includes: a source; a message; encoding the message; the channel; noise within the channel; a receiver; decoding the message; and, fidelity. The cause-effect road map depicted by Trenholm, rudimentary though it may appear, portrays one of the most enduring communication models. The cause-effect road map reduces communication to a series of linear, sequential links: the source encodes and transmits a message; this message travels through a channel until it reaches its destination; and, once the message has arrived, the receiver

decodes it. To the degree that high fidelity (i.e., clarity) is achieved, the decoded message faithfully represents the encoded message and communication between two (or more) human beings has been achieved.

Sometimes, however, the original message becomes distorted at it travels through the channel. "Noise" somehow enters the chain and inhibits either the reception or the decoding of the original message. The cause-effect road map implies, then, that *clear* communication is the human attempt to minimize or eliminate, as much as is possible, the amount of noise in the channel, for the greater the preponderance of noise, the less faithful the decoded message will be to its encoded progenitor.

The cause-effect road map examines human communication from a decidedly materialistic bent. The message is material; it can exist and be examined independent of both the source and receiver. During its transmission, material causes impinge upon the message. The outcome? A lack of fidelity ensues. Were human beings able to discern precisely what causes noise to enter the channel and to interfere with fidelity, they could work to eliminate it and proceed to communicate more clearly. Human communication, in this road map, ends with a material message not an immaterial meaning. School communication, then, is the material messages conveyed by participants through school channels.

It is important to notice how the cause-effect road map provides a deceptively simple, though powerful, model to describe human communication. Over forty years ago, Lasswell (1948) suggested that communication be examined by inquiring "Who said What, to Whom, in Which Channel, with What Effect?" (p. 37). This year, Pajak (1993) expressed the idea that "open communication" would help schools that teach well to learn better. Pajak, citing Drucker,

argues that open communication involves transmitting information through continuous experimentation and feedback, that is, reducing the amount of noise present in the channel. Clearly, the cause-effect road map illuminates how many people actually think about human communication, particularly in schools.

Think, for example, about an algebra teacher's efforts to help a student to overcome his or her failure to solve unknown variables. In the classroom, the algebra teacher attempts to send a clear message about the quadratic equation. Through various media (e.g., lecture, demonstration, practice problems), the teacher encodes the message she wishes to convey. When the student fails to decode this message accurately, the cause-effect road map suggests that this lack of understanding is evidence of the presence of noise in the "instructional channel." If the teacher is able to diagnose exactly what causes the noise which makes it difficult for the student to accurately decode the concept of the quadratic equation, the teacher is acting to clear the communication channel. Thus, by reflecting upon the noise, diagnosing its cause, and remediating it in order to achieve fidelity (i.e., the transmission of the message), the algebra teacher would be acting professionally. And, successful communication would be evident, for example, as the student solves quadratic equations, perhaps on a state-mandated competency examination.

How do teachers assess whether noise is present, literally and figuratively, in the channel of classroom communication? For the most part, they test students' knowledge of concepts communicated. Paper-and-pencil tests help teachers, supervisors, principals, superintendents, boards of education, and even state legislatures to determine whether and to what degree students have accurately decoded the concepts conveyed through the channels of lectures, readings, classroom activities, and homework. In addition, teachers diagnose whether noise is present by

relying on nonverbal communication cues. Students who exhibit a furrowed brow, a quizzical glance, or even a frown might be communicating symptoms pointing to the presence of noise in the instructional channel. The cause-effect road map narrows discourse about school communication to focus upon the channel through which a message is carried. Communication, being material, exists independently of those who send (teachers) and receive (students) communication. Failures to communicate, too, are material, roadblocks causing a logjam in the channel and insuring a lack of fidelity. For the teacher and the student, the material phenomena which impinge upon fidelity are the matter of primary concern. Improving school communication, then, means *ferreting out roadblocks in the channel,* not the individuals attempting to communicate, under the assumption that positive changes will reduce or eliminate the noise present in the channel.

Trenholm (1978, p. 34) argues that "[t]hese assumptions are so ingrained that it is hard to believe communication can be viewed in any other way." But it can.

Road Map #2: The Psychological Cluster

A second road map that can help educators to understand better the discipline of human communication and its importance in schools is the *psychological* road map. This communication cluster takes into account many of the notions posited by the cause-effect road map. However, instead of viewing communication as an *extrinsic* phenomenon, this road map argues that communication is essentially an *intrinsic* phenomenon, i.e., communication is the activity which transpires within the human mind as sensory input enters and is stored. With time and experience, this sensory information becomes a mental store of information that can be used to evaluate new stimuli as they bombard the mind.

Communication theorists like Barnlund (1970) represent this stance, arguing that communication is the human's response to environmental stimuli. But, for theorists like Barnlund, communication is not just a simplistic stimulus/response equation. Instead, the psychological road map suggests that human beings are agents who dynamically interact with their environment. Given greater amounts of time, exposure to their environment, and experience, the agent evolves and modifies the information received through interaction with the environment. The outcome of this interactive process is what Fisher has coined "a mental set," that is, a conceptual structure which is the "collection of criteria or expectations based on prior experiences that are inherently applied to each new experience as a means for determining the similarity or difference between the new situation and past experiences" (Fisher, 1978, p. 141). Humans use their mental sets to filter information received as stimuli.

The psychological road map describes communication as a series of stimuli which bombard the organism. The organism is active in the process of responding to the stimuli; but, at the same time, the organism relies upon the bank of accumulated knowledge gained through previous experience to aid in selecting an appropriate response to the stimuli. Once the organism selects a response, the organism examines the outcome in order to judge its consequences. The consequences will reinforce the organism's mental set, either positively or negatively. Gitlin's (1990) pedagogical model, emphasizing "dialogue" to produce change at the level of classroom practice, is representative of this approach to define school communication.

To communicate effectively with her class, then, the algebra teacher must shift her focus. Instead of focusing upon noise in the channel, she must now reflect upon what her students are communicating as they grapple with exercises highlighting the quadratic equation, considering

how and to what degree her students are responding to the stimuli present in her classroom. Should her students not understand the concept of the quadratic equation, this teacher must focus upon the mental sets her students have constructed out of their prior experiences. Additionally, this teacher must examine her own mental set. She might ask herself: Why can't I understand why it is that my students cannot grasp this concept?

The psychological cluster highlights the notion that communication is an *intra*personal as well as *inter*personal process. Thus, communication involves at least two organisms, both of whom send and receive messages in their attempt to communicate. And, although this notion complicates how educators might understand communication in schools, this is where the discipline of communication raises a challenging notion: as the algebra teacher and her students attempt to communicate with one other, they mutually interact in such a way that they both produce and react to stimuli, all the while *constructing* meaning (i.e., something humans invent or assign to stimuli) through their mental maps. Thus, meaning does not exist outside of those humans interacting in a classroom setting and it is not something received or achieved solely within the classroom setting. Instead, meaning is a cognitive construction, contingent upon human interaction both inside and outside the school.

School communication, according to the psychological cluster, is the neuro-motor stimuli emitted in classrooms. The aim of school communication is to increase "the number and consistency of meanings within limits set by attitudes and action patterns that have proven successful in the past, emerging needs and drives, and the demands of the physical and social setting..." (Barnlund, 1970, p. 88). Whether school communication is a response to the need to reduce uncertainty, to act effectively, or to defend (or strengthen) the ego is not of particular

relevance. Instead, the psychological road map suggests that school communication is *an interactive series of stimuli and responses having important consequences for all participants in the school.* Strictly speaking, any miscommunication between teacher and student, for example, results from an individual's (or group's) failure to respond to stimuli. If the consequence is that the student (or students) or the teacher (or even both) fail to construct meaning, then the mental sets through which their responses have been filtered must be carefully scrutinized.

In contrast to the cause-effect road map (which highlights how noise impinges upon communication within schools), the psychological road map illuminates the cognitive processes which "lay behind" or "manifest themselves" in school communication. Thus, improving school communication, for example, involves working with the intrapersonal and interpersonal mental sets (e.g., learning styles) through which communication is filtered. However, just as the cause-effect road map is deficient because it does not take into account the personal dimensions of human communication, so too the psychological road map is deficient. Unfortunately, the psychological road map only indirectly demonstrates the cognitive processes which it posits are the authentic communication.

Road Map #3: The Interactive Cluster

Imagine an English teacher standing in front of a classroom of thirty-five high school seniors. Their prom is tomorrow evening while today's lesson involves engaging the students in the underlying themes of teenage eroticism and caste status which Shakespeare portrayed in "Romeo and Juliet." Were the teacher to be interested in assessing whether the students knew the themes, he might communicate them through the channel of a lecture. On the other hand, if the English teacher were also interested in making sure that the students understood how these themes expressed their emotions and longings, he might engage the entire class in a discussion, attempting to get the students to verbalize how they have experienced and understood these themes. The spirit of the discussion would provide tangible evidence for the teacher to discern whether and to what degree Shakespeare's ideas were filtering through his students' mental sets.

But, how would this English teacher help his classroom of gangling seniors to construct the meaning Shakespeare intended for his audience to experience?

Floyd and Jacobs (1992) suggest Mead's concept of "minding" would provide a useful construct for this teacher. The authors use Griffin's (1991, p. 75) definition of minding (i.e., "...the pause that's reflective. It's the two-second delay while we mentally rehearse our next move, test alternatives, anticipate reactions...."), to suggest that teachers use language in the classroom to encode words and actions, to apply them, and to develop a feedback loop for interpreting the efficacy of school communication. In the context of this third road map, it is interesting to note that the English teacher is really interested in having his class practice minding not so much to examine the communication channel or his students' mental sets. Rather, Floyd and Jacobs maintain that minding is a tool teachers can use to judge interactions within their

classroom. Floyd and Jacobs further claim that teachers who examine their students' mental processes are in a better position to abandon, reorder, or redefine the meanings they attempt to communicate to a room full of students.

How, then, is the fictitious English teacher to know and understand the communication taking place in his classroom in order to interpret it accurately?

Interestingly, the *interactionist* road map posits that all material objects (including human beings) are by-products of actions which symbolize meaning (Miller, 1992). Meaning, however, is not constructed as a direct consequence of the interactions between teachers and students, as the psychological road map suggests. Instead, meaning emerges as people interact with behavior (Blumer, 1969).

The interactionist road map accents the notion that classrooms are like stages. In a classroom, for example, teachers and students act toward one another and the objects in a classroom through learning activities designed to convey meanings. If teachers (or students, for that matter) were to scrutinize their actions in classrooms, it would soon become apparent that many (if not most) of the action taking place reveals individuals who act not in predetermined nor haphazard ways; instead, a careful analysis of classroom interaction would reveal how these individuals have planned to act toward one another as objects in order that they might see themselves as others do. For example, if the seniors express appreciation for Shakespeare's themes through a spirited discussion relating Romeo and Juliet to their own lives, the English teacher experiences satisfaction that he has communicated with his students at least one meaning of Shakespeare's Romeo and Juliet. Or, in the example of the algebra teacher, a spirited discussion evidencing her students' appreciation of how the quadratic equation solves unknowns

would give evidence that she has communicated not only what the quadratic equation is but also what it can mean for people to solve the many unknowns in their lives.

This communication cluster portrays human beings as creators of meaning who share it through the exchange of symbols. When the algebra teacher and her students, for example, regard the object of the lesson about the quadratic equation in similar ways, symbolic interaction theory maintains that self and society are created as each party to the exchange assumes one another's perspectives, encode the messages from the viewpoint of the other, and produce a shared culture, knowledge, and language. The classroom, then, is a stage; upon it, actors play roles; and, the classroom context is the product resulting from the interaction of unique individuals who are actively shaping their individuality at the same time.

In this sense, Mead's notion that the self is an active ego, an "I," initiating action in order to observe oneself as an object, "me," explains just how classrooms function as stages where interaction gives context to experiences of the self. In turn, these interactions allow the individual to internalize and to test social processes. Without interaction, Fisher (1978, pp. 168-79) argues, the self would not exist because the individual would not be able to observe himself as a social object and thus, would not be able to communicate the self symbolically.

In contrast to the cause-effect road map which depicts communication existing within a channel and the psychological road map which portrays communication as a filter through which human beings interpret their world, the interactionist road map describes school communication as *the product of individuals who simultaneously experience and interpret meaning from their interactions in schools*. Fidelity is not a focal issue nor is assessing the mental set through which one communicates. Trenholm demarcates the cause-effect and psychological perspectives from

the interactionist perspective, arguing that "interactionism locates all human action within society, recognizing that while society is based on individual actions, individuals act as they do because they are members of society. The individual cannot be thought of in isolation from interaction with others" (Trenholm, 1991, 1986, pp. 37-38).

In schools, actions, like the objects that make up the world (including human beings), are products of symbolic actions, constructed through school communication. What is at stake in the interactionist road map is the creation of shared meaning. The interaction theorist wonders: How do individuals and groups in classrooms and schools derive meaning? And: What self are the individuals portraying as they interact in schools? The interactionist road map recognizes the validity of social action and role-taking as shaping the meanings humans construct to understand themselves and their world...even in English and Algebra classrooms.

Road Map #4: The Pragmatic Cluster

A fourth road map, the *pragmatic* cluster, expands the interactionist road map. The fouth road map likens school communication to a "system" within which each individual's actions and utterances can be understood only in relation to the acts and utterances of the other individuals present in the classroom. As a system, the school functions only by virtue of the interdependence of its parts.

The pragmatic road map is embedded in systems theory. A system, by definition, is an interrelated set of elements acting together as a unit (Rapoport, 1968). A classroom, for example, is a collection of people. When the people in a school interact interdependently (that is, they share common goals and communicate with one another), they function as a system. An outsider can only understand the individual acts and utterances by examining these as they related to the

words and actions of others within the system. A system, however, may be open or closed. An open system changes and grows as it exchanges energy or information with its surrounding environment. On the other hand, a closed system is static; it does not exchange energy or information with its surrounding environment.

For example, if one were to observe a middle school social studies class leaving school at ten o'clock on a Tuesday morning and standing idly around the local public transportation company's bus stop, the pragmatist perspective argues that the meaning of these actions can only be interpreted by understanding how they relate to the system of which they are a part. In fact, the social studies class has been studying local government and has planned to visit City Hall. This class trip, including the use of public transportation, is designed to help the students experience the social studies concepts they have been examining as part of their classwork. Hopefully, what the students will learn from this exchange with their environment will help them develop their capacity to know, understand, and relate to the concept of local government to their lives in novel and better ways. In the end, both the teacher and the students will learn through their words and actions, responding appropriately to the information received throughout the process of the field trip.

An open system is also capable of self-correction because an open system has the capacity to respond to the new energy or information it receives from its environment. One can be sure, for instance, that any glitches encountered along the way (or, on the return trip) will be duly noted. In the future, the social studies teacher will respond by using this data to better plan and execute a field trip.

Another dimension of an open system is that the system itself is greater than the sum of its individual parts. What teachers and students can accomplish when they share common goals and communicate with another is greater than what teachers and students can accomplish individually or in isolation from one another. Schools (and classrooms, in particular) are open systems where learning is enhanced as teachers and students interact purposively. It is as if individual words and actions, which could be accomplished outside this particular system, are transformed within the open system beyond what one could expect. Unfortunately, however, one cannot predict exactly how the individuals within the open system are going to respond to others in their interactions.

In contrast, a closed system is one which does not exchange energy or information with its environment. Because of this feature, a closed system is not self-correcting (Hall and Fagan, 1956). Classrooms, where teachers instruct students about factual data without being attentive to the actions and utterances of the students, function as closed systems. Were one to supervise these classrooms, she might note students drawing pictures, writing and exchanging love notes, and day-dreaming as the teacher drones on and on until the bell rings.

The pragmatic road map sharpens the focus of inquiry by examining the communication exchanges between members of the educational system instead of focusing upon the individual members of the system. Pragmatically speaking, the noise in a channel, what motivates an individual, or how individuals within a system construct meaning, is of little consequence. In Scheflen's view, the pragmatist is primarily interested in the redundant patterns of behaviors within the system and how individuals respond to these (Scheflen, 1974, p. 183). Thus, behavior within the educational system, not other people, causes other behavior to emerge.

This road map charts school communication by unearthing redundant behavior patterns in order to predict communication outcomes. For example, as teachers interact within the open system of a faculty meeting, they define their relationships and pattern their behaviors. During the course of a school year, as the faculty repeats their interactions at faculty meetings, their behavior escalates in a complementary or symmetrical fashion (Bateson, 1958, p. 176). And so it is that, when questions are raised by the vice-principal for academics, the coaches who are seated at the back of the meeting room read the sports section of the daily newspaper, paying little attention to the spirited debate ensuing between the English and Math department faculties. But, as the agenda shifts to staffing the ticket booth at Friday night's football game, the coaches suddenly become engaged in a heated debate about the lack of faculty involvement in the sports program. Over the years, these and other such complementary behaviors between the faculty spiral and the English and Math faculty hone the identity that they are the "real instructional faculty" and that the "jocks really aren't professional educators." Internecine competition about their identity represents a symmetrical escalation of their behavior pattern within the system and, unless one understands communication in the system, it is difficult to understand why these and other such charges are leveled by one faction against another.

The pragmatic road map makes it possible to use the educational system to make sense of its components to outsiders who wonder why certain faculty don't demonstrate interest in academic affairs and others are disinterested in extracurricular athletics.

The important dimensions of the pragmatic road map for understanding school communication are the act, the interact, constraints, redundancy, and system. Instead of focusing upon the individual senders and receivers of school communication, the pragmatist defines school

communication as *the recurrent behavior patterns which explain the educational system itself.* Ultimately, the self disappears from consideration in order that patterns might be identified and mapped. Then, a researcher is in a better position to identify, for example, what learning is, how it emerges within schools, and how some repetitive behavior patterns are associated with some learning experiences than are others.

Road Map #5: The Semiotic Cluster

In the midst of a heated argument following on the heels of a supervisory evaluation, the fictitious algebra teacher became irate at what she believed was unfounded criticism of her pedagogical method which the principal characterized as "rife with social mapping and void of content." In turn, the algebra teacher called the building principal an "overweight bag of trash." When things settled down a few days later, the teacher met again with the principal and was overheard to have said, "I'm really sorry. I didn't mean what I said." In her apology, the teacher seemed to be suggesting that there exists a difference between "what I said" and "what I meant." That is to say, spoken words sometimes do not really signify one's deepest thoughts (or, for that matter, best interests).

The *semiotic* road map illuminates a fundamental dimension of school communication, one neglected by the other four communication road maps. In this perspective, school communication is the product of those words and actions which convey meaning. Semiotic theory posits that words and actions are signs. Humans select and use words and actions in conjunction with and in opposition to other signs within their society's linguistic system. For example, though the principal mentioned earlier might indeed be overweight, this school official certainly is not a "bag of trash." Or, for students, "school" conveys meaning not because it refers to a building or to

what students must do with nearly one hundred and eighty days each year of their youth, but because school can be used in combination with other words like "classroom," "teacher," and "report card" as well as in opposition to other words like "vacation" and "sleeping in" or even "boring." "School marm" means what it does not because it points to an actual "school" or "marm" but because a school marm is neither.

The Swiss linguist, Ferdinand de Saussure (1974), first proposed this subtle distinction between what words signify and the meaning they construct for society. When Saussure suggested that humans communicate meaning through the signs of their linguistic system, he portrayed discourse in terms of the social conventions which have been adopted in order to make it possible for members of society to communicate their particular views and values as well as the ways humans talk, write, and think. For Saussure, human beings are born into and learn a predominant discourse which governs their worldview and shapes how they communicate. School administrators, teachers, and students, for example, all have their particular mode of discourse, even though they all, for the most part, speak the same language. The communication theorist's task, then, involves discovering the systematic structure through which humans in schools create contrasts and oppositions among the elements of the language system constructed to communicate with increasing precision what it is they mean.

The semiotic road map is akin to the interactionist and pragmatist road maps in that semiotics highlights the importance of the symbolic forces shaping the individual. In this system, however, the self is denigrated in favor of the system of signs. Thus, what the algebra teacher states about the quadratic equation is not of particular importance. Instead, how the algebra teacher's discourse about knowing and understanding the quadratic equation signifies social

values and consequences is given primary importance in this road map. The systemic structures which lie beneath the surface of classroom talk, action, writing, and thinking become, in the semiotic perspective, an ideology portraying what people really believe is true and valuable. This ideology is what works to conserve and preserve the society within which it is used (Belsey, 1980). This dimension of the semiotic perspective has served as the foundation of such disparate theories as psychoanalysis, Marxist political and economic theory, and literary criticism, all of which attempt to decode the ideologies which lie hidden beneath the surface of discourse.

Semiotics, then, envisions teachers and students as existing within a structure of discourse behind which can be found the transparent ideology communicated through the school's dominant discourse. Perhaps these individuals are not conscious about how discourse communicates the organization's ideology, however, their communication reflects just how they constitute themselves and their meaning within the school society.

The semiotic road map helps us to conceptualize how students, teachers, and principals, produce meaning in their lives. For the semiotician, school language itself is meaningless; rather, it is what school language signifies that means something. For example, although some algebra students deny it, most do attempt to know and understand algebra, especially if they want to be part of the society which values and rewards mathematics education. Semiotics suggests that, were educators and students able to unearth the ideologies which lie hidden beneath the surface of school communication, members of educational organizations could become more critical of themselves, gain greater control over their lives, and exercise a greater degree of responsibility for their society's direction.

A Wayside along the Road

At first glance, the abstract theories associated with the discipline of communication might appear to possess little relevance for traditional educational theory and practice. Wouldn't it be easier to maintain, along with Bridges (1977), that understanding school communication is simply a matter of assessing "directional flow"? Or, in concert with Gitlin (1990), ought we not focus on the dialogue transpiring in schools in order that individual teachers and all those with legitimate interests in education might begin to form a community that can effect "productive" school change?

This article responds "no," suggesting that the notions of "directional flow" and "critical dialogue" are overly restrictive in scope. Instead, this article broadens discussion about the discipline of communication in order to highlight how this discipline's theoretical abstractions might be utilized to provide a larger context within which educators might examine the important educational variable, school communication. This larger context, the terrain which this discussion has covered, was first introduced in Figure 1. And, even though the journey to examine this discipline and its applicability to schools can be frustrating because the itinerary features some nettlesome curves, contours, and detours, the issues raised by the discipline do help clarify in a seminal way the important educational variable "school communication" and how it can be defined from five diverse perspectives.

The purpose for introducing this discipline to educators was not to attempt, in F.E.X. Dance's imaginative phrase, "to nail Jell-O to the wall" (Dance, 1983). Rather, five road maps were explored in this article to adapt Fisher's (1978) framework of "perspectives." These road maps cluster five theoretical orientations to the discipline and apply each to school

communication. These road maps illuminate how some educators rely primarily upon one communication cluster while others may utilize several clusters in their efforts to navigate the terrain of school communication. In this article, it is argued that the combination of these five clusters, the "communication atlas," which provides the most comprehensive introduction to this discipline and how it focuses attention upon the important variable, school communication. This communication atlas is provided in Figure 2.

[INSERT FIGURE 2 HERE]

In general, this article serves merely to introduce this discipline to educators. Much scholarly work remains. Not only do teacher educators and faculties of educational leadership need to become conversant with clusters which make the discipline more comprehensible, these educators also need to delve into and explore the theoretical underpinnings which support each cluster, applying these theories to educational practice. Educators might select Littlejohn (1989, 1983), Trenholm (1992, 1986), or Sereno and Mortensen (1970) as a resource to approach the discipline of communication. At the very least, teacher educators and faculties of educational leadership might study Littlejohn, Trenholm, or Sereno and Mortensen to overcome the apprehension which makes people hesitant about initiating a journey into foreign terrain. This study might also help educational theorists and practitioners alike to appreciate a family of concepts which can help them bridge the gulf of what sometimes appears to be their divided interests. Potentially, this study could enable these educators to conceptualize more clearly the educational variable, school communication, and how it may well be the soul of the educational system. Lastly, another important outcome might emerge from such a study: teacher educators and faculties of educational leadership might begin to learn how to communicate with their

students and one another as well, engaging in what Argyris and Schön (1974) have called "double-loop learning."

Idealistically, then, the study of the discipline of communication might help educators to better understand what Sarason (1972) was attempting to communicate when he wrote about some educators he had been studying:

> Generally speaking, these teachers were not as helpful to [youth] as they might have been or as frequently as the teachers themselves would have liked to have been. It took me a long time to realize that what would be inexplicable would be if things turned out otherwise, because schools are not created to foster the intellectual and professional growth of teachers. The assumption that teachers can create and maintain those conditions which make school learning and school living stimulating for [youth], without those same conditions existing for teachers has no warrant in the history of [humankind]. That the different efforts to improve the education of [youth] have been remarkably short of their mark is in part a consequence of the implicit value that schools are primarily for [youth], a value which gives rise to ways of thinking, to a view of technology, to ways of training, and to modes of organization which make for one grand error of misplaced emphasis.
>
> Dewey knew all this well....[He] created the conditions for his teachers which he wanted them to create for their students (1972, pp. 123-24).

A general introduction to the discipline of communication might well function to enable educators to feel more comfortable grappling with the discipline of communication and to

understand better how it transpires in schools, particularly within their classrooms. In Gitlin's assessment, "[t]he question that remains is how to establish a school community in which all groups, including students, would have a say in school matters and in which reason and the common good would replace status and authoritarianism as the guiding principles" (1990, p. 556). Were educators able to engage in *clear* communication in *local* schools, students and teachers might actually learn to navigate school communication more effectively where it counts most: in their classrooms.

References

Argyris, C. & Schön, D. A. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco, CA: Jossey-Bass Publishers.

Barnlund, D. C. (1970). A transactional model of communication. In K. K. Sereno & C. D. Mortensen (Eds.), *Foundations of Communication Theory* (pp. 83-102). New York: Harper & Row.

Bateson, G. (1958). *Naven* (2nd ed.). Stanford, CA: Stanford University Press.

Belsey, C. (1980). *Critical practice*. New York: Meuthen.

Blumer, H. (1969). *Symbolic interactionism*. Englewood Cliffs, NJ: Prentice-Hall.

Bridges, E. M. (1977). The nature of leadership. In L. L. Cunningham, W. G. Hack, & R. O. Nystrand (Eds.), *Educational administration the developing decades* (pp. 202-230). Berkeley, CA: McCutchan.

Cusick, P. A. (1992). *The educational system: Its nature and logic*. New York: McGraw-Hill.

Dance, F. E. X. (1967). Toward a theory of human communication. In F. E. X. Dance (Ed.), *Human communication theory: Original essays* (pp. 288-309). New York: Holt, Rinehart & Winston.

Dance, F. E. X. (1970). The "concept" of communication. *Journal of Communication, 20*, 201-210.

Dance, F. E. X. (1982). *Human communication theory: Comparative essays*. New York: Harper & Row.

Dance, F. E. X. (1984). What is communication? Nailing Jell-O to the wall. *Association for Communication Administration Bulletin, XLVIII*, 4-7.

Dance, F. E. X. & Larson, C. E. (1972). *Speech communication: Concepts and behavior*. New York: Holt, Rinehart & Winston.

Dance, F. E. X. & Larson, C. E. (1976). *The functions of human communication: A theoretical approach*. New York: Holt, Rinehart & Winston.

de Saussure, F. (1974). *Course in general linguistics*. (T. de Mauro, Trans.) Paris: Payot.

Fisher, B. A. (1978). *Perspectives on human communication*. New York: Macmillan.

Floyd, K. W. & Jacobs, R. M. (1992, August). *The discipline of communication: A practical paradigm for educational leadership?* Paper delivered at the 10th Annual Meeting of the Association of Management, Las Vegas, NV.

Gitlin, A. (1990). Understanding teachers dialogically. *Teachers College Record, 91*(4), 537-63.

Griffin, E. M. (1991). *A first look at communication theory*. McGraw Hill.

Hall, A. D. & Fagan, R. E. (1958). Definition of a system. *General Systems Yearbook, 1*.

Jacobs, R. M. (1992). Hermeneutics: Probing the nature and logic of school communication. *The Association of Management Proceedings Education, 10*(1): 102-107.

Lasswell, H. D. (1948). The structure and function of communication in society. In L. Bryson (Ed.), *The communication of ideas* (pp. 39-51). New York: Harper & Brothers.

Littlejohn, S. W. (1989). *Theories of human communication* (3rd ed.). Belmont, CA: Wadsworth Publishing Company.

Lysaught, J. P. (1984). Toward a comprehensive theory of communication: A review of selected contributions. *Educational Administration Quarterly, 20*(3), 101-127.

Miller, D.L. (1973). George Herbert Mead: Symbolic interaction and social change. *The Psychological Record, 23*, 294-304.

Pajak, E. (1993). Change and continuity in supervision and leadership. In G. Cawelti (Ed.), *Challenges and achievements of American education* (pp. 158-86). Washington, DC: Association for Supervision and Curriculum Development.

Rapoport, A. (1968). Foreword. In W. Buckley (Ed.), *Modern systems research for the behavioral scientist* (p. xvii). Chicago, IL: Aldine.

Sarason, S. (1972). *The creation of settings and the future societies.* San Francisco, CA: Jossey-Bass, Inc.

Scheflen, A. E. (1974). *How behavior means.* Garden City, NJ: Doubleday.

Sereno, K. K. & Mortensen, C. C. (Eds.). (1970). *Foundations of communication theory.* New York: Harper & Row.

Shannon, C. & Weaver, W. (1949). *The mathematical theory of communication.* Urbana, IL: University of Illinois Press.

Simon, H. A (1957). *Administrative behavior* (2nd ed.). New York: Free Press.

Swanson, D. L. & Delia, J. G. (1972). The nature of human communication. In R. L. Applebaum & R. P. Hart (Eds.), *Modules in speech communication.* Chicago, IL: Science Research Associates.

Trenholm, S. (1991, 1986). *Human communication theory* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.

Figure 1. A Communication Atlas: Avenues to School Communication

ROAD MAP:	Definition: School Communication is...
cause-effect	the material messages conveyed by participants through school channels
psychological	the interactive series of stimuli and responses having important consequences for individual behavior in schools
interactionist	the product of individuals who simultaneously experience and interpret meaning from their interactions in schools
pragmatic	the recurrent behavior patterns which explain the educational system
semiotic	those words and actions, communication signs, which convey meaning

Figure 2. A Communication Atlas: Defining Concepts

ROAD MAP	COMMUNICATION OCCURRENCE	ROADBLOCK	CLEAR COMMUNICATION	FOCUS OF COMMUNICATION
cause-effect	in a channel	noise in channel	high fidelity	instrumental means to diagnose and eliminate noise
psychological	through a mental set constructed upon prior experience	mental set causes an inappropriate response to neural-motor stimuli	congruity between one's response and the occurrence stimulating the response	the intra-personal mental set filtering messages
interactionist	upon a social stage	interpersonal lack of shared meaning	creation of shared meaning	symbols conveying meaning(s)
pragmatic	in an open or closed system	frozen behavior: predictable, closed responses	unfrozen behavior: thoughtful, open responses	redundant behavior patterns
semiotic	through language	mistaking the sign for reality	examination of the deep structure of meaning	signs conveying ideologies

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Roadmaps to understand school communication	
Author(s): Jacobs, Richard M.	
Corporate Source: The Journal of Management Systems	Publication Date: 1993

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

[x]

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

[ ]

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

[ ]

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, please

Signature: Richard M. Jacobs	Printed Name/Position/Title: Richard M. Jacobs, Associate Professor
Organization/Address: VILLANOVA UNIVERSITY Villanova, PA 19085-1699	Telephone: 610-519-4641 FAX: 610-519-4623 E-Mail Address: rjacobs@email.vill.edu Date: 07/12/99

(over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2nd Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

EFF-088 (Rev. 9/97)