Some perspectives are presented that help explain communication networks in institutions of higher education and the factors that impede or facilitate their efficient functioning. The first theory that informs this exploration is that of K. Wieck (1969), which states that communication can be viewed through the lens of "sensemaking." The collective sensemaking of organizational players is based on communication that has been filtered or perceived selectively by key players. The theories of J. Pfeffer suggest that by assessing who holds the information and how much of this information they are willing to divulge, a communication network can be mapped to account for the gatekeeper role in an organization. Notions of coupling based on the work of H. Mintzberg provide a foundation from which to analyze communication networks. These combined perspectives provide an inclusive way of viewing communication networks and mapping a network that provides an institution with the greatest effectiveness and efficiency. (SLD)
Mapping Efficient Communication Networks in Higher Education

By

E. S. Lubinescu, R. P. Prabhu, S. L. Terheggen
Mapping Efficient Communication Networks in Higher Education

By: Lubinescu, E.S., Prabhu, R.P., & Terheggen, S.L.

2000

Problem Statement

The purpose of this paper is to understand communication networks in institutions of higher education and the factors that impede or facilitate their efficient functioning. Institutions of higher education have been characterized as an “organized anarchy” and have been viewed as “loosely coupled” systems (Cohen and March, 1974; Weick, 1976). How can effective communication be carried out given these characteristics? Communication entails not only verbal and written communication but also symbols that convey particular meaning to organizational participants (Tierney, 1989). One-way communication can be conceived as a process where the communicator encodes a concept, sends out a message and the decoding is done by the receiver (Schramm, 1965). The communication process can also be described through the marketing lens of a stimulus-response model, where specific stimuli are sent out to participants in the hope of seeking a particular response. (Rothschild, 1987). This paper will focus on understanding essential elements of communication networks in institutions of higher education and point to factors that impede or facilitate its functioning.

Theoretical Perspectives

Four bodies of literature inform this proposed study, helping to ground our conceptualization. These three theories include Weick’s theory of sensemaking, Pfeffer’s concept of power, Mintzberg’s administrative structure, and Thompson’s methods of coupling.

Weick’s Sensemaking

Communication can be viewed through the lens of “sensemaking” (Weick, 1969; 1995). According to Weick (1969;1995), people organize to reduce the information uncertainty they face. Participants selectively perceive the environment; they make collective sense of what is happening and retain this in the form of routines. These repeated routines form the process of organizing. This model shifts attention from structure to process and places importance on the individual actors and the relationships between them. The collective sensemaking that organizational players participate in is based on communication that has been filtered or perceived selectively by key players. Effective communication networks provide important tools for organizational change. Given the complexity of the communication process in higher education, it is essential to look at formal as well as informal networks of communication.

Pfeffer’s Concept of Power

The concept of power is intrinsically linked to the organizational structure of the institution. “Power is context or relationship specific. A person is not “powerful” or “powerless” in general, but only with respect to other social actors in a specific social relationship” (Pfeffer, 1981). Pfeffer (1981) also states, power is a result of the structure which was created by the division of labor and departmentation. Pfeffer & Salancik
Lubinescu, Prabhu, & Terheggen, Page 2

(1974) argue, power is more likely to operate when a resource is scarce or a decision being made is of importance. The most obvious form of power lies in the formalized structure of an institution and with the formal authority or chain of command. In fact, “the first and frequently the most important determinant of governance is the formal hierarchy of evaluation and authority existing in the organization” (Pfeffer, 1978).

Another important form of power proposed by Pfeffer concerns power over information and access. “One’s position in the organizational structure profoundly affects the amount of information one possesses, and one’s centrality in the communication network” (Pfeffer, 1978). Tied to Pfeffer’s conception of power and authority is organizational politics. Organizational politics provide a foundation upon which it is easier to understand the interplay between factions within the institutions. Political power concerns a “push and pull of interests”, “shifting coalitions and interest groups”, and “withholding of information in a strategic manner” (Pfeffer, 1981). Pfeffer (1981) argues that once “consensus is lost, once disagreements about preferences, technology, and management philosophy emerge, it is very hard to restore the kind of shared perspective and solidarity which is necessary”. The political structure is intentional applications of power. The role of gatekeepers in holding on to information and access is important to assess within the structure of higher education. By assessing who holds the information and how much of this information they are willing to divulge, a communication network can be mapped to account for this role in an organization. Accounting for the influence of power can provide solutions as to how effective communication can be undertaken in such an environment.

Mintzberg’s Administrative Structure

Mintzberg noted, a simple organizational structure can rely on mutuality and coordination to accomplish basic work, but as the organizational structure gets more complex and the division of labor grows larger, there is a need for “direct supervision”. With the induction of an administrative head, a hierarchy is established. Mintzberg’s five basic parts of an organization are the operating core, the middle line, the strategic apex, the technostructure, and the support staff. To provide insight into communication within the five basic parts of an organization as detailed by Mintzberg, Thompson (1967) has introduced three ways in which work can be coupled. The first is pooled coupling where independent members share resources. The second is sequential coupling where work is conducted in a “series”. The third type is reciprocal coupling where members “feed their work back and forth among themselves; in effect each receives inputs from and provides outputs to the others”. These methods of coupling work provide a foundation from which to analyze communication networks.

Conclusion

These combined perspectives provide an inclusive way of viewing communication networks and mapping a network that provides an institution with the greatest effectiveness and efficiency. Communications networks are an extremely visible and functional aspect of higher education. This paper explores the path of communication, the efficiency of communication, and the results of effective and ineffective communication networks in higher education. With increasing budget deficits facing higher education, efficiency is an important indicator. The amount of resources
spent on the process of communication demands a means of knowing the most effective and efficient way to communicate across any type of boundary, whether that boundary is geographical, cultural, or disciplinary. This paper provides a foundation for future research in the area of communication networks in higher education. We are confident research in this area will determine the importance of analyzing communication networks in an effort to make institutions more efficient.
References


## REPRODUCTION RELEASE

### I. DOCUMENT IDENTIFICATION:

<table>
<thead>
<tr>
<th>Title</th>
<th>Mapping Efficient Communication Networks in Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Edward S. Lubinescu, Radhika P. Prabhu, and Sara L. Teshggo</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2A</th>
<th>Level 2B</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="over" alt="Sample" /></td>
<td><img src="over" alt="Sample" /></td>
<td><img src="over" alt="Sample" /></td>
</tr>
</tbody>
</table>

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

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

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

Documents will be processed as indicated above. 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**: [Signature]  
[Edward Lubinescu]  
**Printed Name/Position/Fax:**  
[Edward Lubinescu]  
**Telephone:**  
[814-235-9438]  
**Fax:**  
[814-235-9438]  
**Email Address:**  
[EDWARDL@PSU.EDU]  
**Date:**  
[01/29/01]