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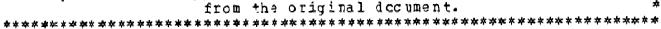IDENTIFIERS   Interorganizational Structures; Kansas; Loosely
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ABSTRACT
                Interorganizational structures may have elements that
promote or reduce stress and conflict among participants. This study
identified such elements in an interorganizational structure that was
classified as a loosely coupled system. The interorganizational
structure examined was the Internships, Certification,
Equity-Leadership, and Support (ICES) Project, a project designed to
test a model for increasing the number of women holding
administrative positions in the Kansas Public School System. Data
were collected through participant observations of the project
coordinator. Project elements that promoted conflict included
diversity of goals of participants, the liabilities of newness, the
organization's brief lifespan, marginality of its goals to the
concerns of cooperating agencies, responsibility overload by
participating administrators, and asymmetrical interdependence of
units. A reduction of conflict was brought about by the project being
a loosely coupled system, that is, a system of units retaining their
individual identity and logically and physically separate from other
elements. Although the loose coupling produced initial frustration
for participants who expected clear authority relationships and quick
decisions, ultimately loose coupling allowed participants to define
their roles, responsibilities, and relationships clearly and to
maintain enthusiasm for their immediate tasks. Loose coupling enabled
the conflict-prone organization to persist and meet its objectives.
(Author/JM)

CONFLICT AND STRESS IN INTERORGANIZATIONAL

STRUCTURES

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Introduction

Interagency structures often are created to solve a specific problem or to attain a particular goal. This paper analyzes one such structure. ICES, a Project of Internships, Certification, Equity-Leadership and Support, is typical of many externally funded organizations designed to promote social change. ICES was implemented to test a model for increasing the number of women holding administrative positions in a state's public school systems. An understanding of the interrelationship between structure and behavior in this organization is of value to those planning to implement similar structures.

In addition, the organization fits the catageories of organized anarchies and loosely coupled systems. This analysis adds to an understanding of the effects of loose coupling in organizations where competing goals, perspectives and values and unclear technologies create a basis for unresolvable conflict.

The paper briefly describes the research methods used then discusses Project ICES as an organized anarchy. It demonstrates that several structural characteristics promote organizational conflict, participant stress, and inefficiencies. It then examines the effects of loose coupling as a mechanism, sometimes consciously employed, for reducing organizational conflict and enabling conflict prone structures to persist.

Data Sources

The analysis was developed as part of a continuing formative evaluation of Project ICES and the model on which it is based. The two-year project is three quarters completed at this time, and a final

evaluation is not yet possible.

Data is being collected through participant observation. As project
coordinator, the author has access to relevant documents (e.g. correspon-
dence, progress reports, guidelines to participants, and the proposal),
participates in most decisions, regularly interviews interns and their
administrators, and is in frequent contact with other members of the
Executive Committee.

Project ICES

ICES, a project of Internships, Certification, Equity-Leadership,
and Support, resembles many federally funded structures designed to effect
social change. The project's formal goal is to develop and validate a
model to increase the number of women holding administrative positions
in a state's public school systems. To accomplish this, the project
joins representatives of three agencies--The University of Kansas, the
Kansas Department of Education, and the United School Administrators
(the umbrella organization of administrators' associations in Kansas)
in its Executive Committee. The Project has a cooperative relationship
with ten school districts. The cooperating districts selected one or two
(depending on size of district) women from their teaching staffs to
participate in the program, and provide settings where the participants
work as administrative interns for an academic year. In return, the
project pays each intern a salary amounting in most cases to less than
half the annual earnings as a teacher. ICES provides some technical
assistance to the interns and districts, direction in designing the
internships, and some supervision of the interns. The university also

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trains the interns through a combination of regular coursework and specialized workshops. The participating districts represent rural and small town, urban and suburban systems, and they are located throughout the state.

The attention of these actors is focused on a group of thirteen women preparing to become school administrators. The interns have varied backgrounds and interests, and their ages range from late twenties to mid forties. At the beginning of the program some had enough administrative courses to be eligible for certification while others had none.

The project exhibits the characteristics of an organized anarchy-- problematic goals, unclear technology, and fluid participation. The project's overarching goal is to promote changes in a state so that women will have the opportunities to be hired as school administrators. The formal goal, as stated above, is the development, validation and dissemination of a model. To accomplish these goals, the project proposes to achieve a broad range of objectives such as changing attitudes of those who hire administrators, adding women to the pool of qualified applicants, helping women gain sponsors and access to formal and informal networks of educators in the state, and disseminating information about the model to relevant publics in the state and nation.

Participants view these goals differently, objecting to some, ignoring others, and enthusiastically working toward those that appear most relevant to their needs and expertise. Most participants focus on goals and activities of direct concern to their own organization. For example, school administrators attend to activities involving planning

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and internships and are indifferent to tasks related to dissemination
of the model.

The technology, or technologies to achieve those goals and objec-
tives are unclear. There is no universally accepted and validated
method of training good administrators, male or female. Neither re-
search nor practice has established a consensus about overcoming the
particular problems and needs of women who plan to enter a male-dominated
field such as educational administration. There is no guaranteed way
to increase women's participation in formal and informal networks or to
change attitudes of school board members and the public toward women
in administration. Finally, the people the project works to change are
varied. The interns' different backgrounds and career goals require
individualized programs. Their goals, interests and skills are likely
to change during the course of the project, and such changes will
necessitate new arrangements for the university and school districts.
Thus the cause and effect relationship between many ICES activities and
the project's goals and objectives are only tentative assumptions.

Participation is fluid. Many administrators are involved only
during the period when an intern is assigned to them. Others participate
only in a few areas or decisions.

Several aspects of the organization promote conflict among
participants. During the first few months of the project, some discord
was evident. A formative evaluation conducted at the half way point of
the first year identified several structural bases for conflict. Theory
predicted and empirical evidence suggested that the project was structured

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for conflict. Eight conditions which explained initial problems allowed prediction of future problems were identified.

Diverse Goals

The diversity of goals and varied perspectives of the organized anarchy have been noted above. Initially, practioner suspicions of universities created a division within the Executive Committee. Disagreement was most evident in one of the first major choices the committee faced--the selection of a project coordinator. Accommodating different perspectives about the kind of person needed to fill the position extended the hiring process. The coordinator began work five months after the project's starting date. This delay had negative consequences, for the coordinator was the only full time professional staff member assigned to the project. Because the coordinator's tasks were not being performed, the newly selected interns had little information about the project and even less communication from the Executive Committee. They were confused about expectations, requirements, roles and responsibilities. As a result many were anxious and expressed dissatisfaction with the project. Intern perception of a lack of organization persisted through the first months of the project.

The Liabilities of Newness

The project is a new organization. Stinchcombe (1965) noted that a new organization, expecially if it involves new organizational forms, is subject to particular "liabilities of newness." Members of new organizations must learn new roles without the assistance of former occupants of their positions. The processes of inventing and learning

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new roles and determining the relationships among them involve costs in time, anxiety, temporary inefficiency and conflict. Until roles are defined, people who need to know may not be informed. Temporary bottlenecks that experience will open-up create situations that can only be solved with a "perpetual psychology of crisis." Participants must rely on social relationships among strangers, and thus trust is more precarious (Stinchcombe, 1965, p. 148). Until members of the organization get to know one another, they cannot predict how others will respond, and they cannot know the strengths and weaknesses of their colleagues.

Just as the organization is attempting to accomplish significant tasks necessary for its long term success, its members are learning how to work with each other, how to perform new tasks, and how to manage the structure. Anxiety may be high, temporary inefficiencies may be costly and frustrating, and interpersonal conflicts may arise. These conditions fuel the psychology of crisis, which in turn feeds back and adds to anxiety. It is not surprising that new organizations fail so often.

Temporary Organization

Temporary systems often are seen as powerful mechanisms to effect change in permanent organizations.[1] However, not all temporary organ-

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[1]Eg. Miles (1964, pp. 437-490). However, the temporary systems Miles discusses differ in many ways from the ICES model. They tend to be more limited in time, have clear goals, isolate participants from their usual activities, and to be limited in space to provide a high interaction rate among participants.

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izations are able to resolve the liabilities of newness. ICES is a temporary system with a lifespan of only two years, and most participants are associated with it for even less time. As a result, many tasks that permanent organizations might routinize are treated as unique events, to be dealt with only once in the organization's history. In some cases participants will not devote time to structure or even record decisions and reasons for them.

If considerable energies are not devoted to structuring decision making, communications, and interactions, the organization will appear chaotic to participants and observers. Knowledge gained by individuals may not become organizational knowledge, and the same problems will recur, thus exacerbating the psychology of crisis. The project's marginality and participant role overload prevent people from spending the time required to establish structure.

Marginality

Participation in ICES is not a central activity for the member organizations. Increasing women's participation in educational administration is not a major goal for any of these units. Tax-payers do not fund public schools, universities and state departments of education to provide opportunities for women to enter administration. Members of administrator organizations do not pay dues in order to add women to their ranks. Individual members of the component organizations may even oppose that objective.

The member units are organized to accomplish other objectives. Thus it cannot be expected that participating units will alter their

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procedures dramatically to accommodate ICES needs. Often ICES will
be subordinate to pressing organizational problems more directly
related to central goals. ICES staff are not always likely to think
about constraints other organizations face. As a result, scheduled
activities may not occur as planned. Those not in direct contact with
the cycles of the school year forget about monthly schedules of board
meetings, the press of contract negotiations and hiring, and end of the
year stresses. As an example, a conflict between this cycle and the
schedule for planning internships meant that some internship settings
were not identified before interns left their districts for the summer.
This created some unnecessary anxiety for those interns.

Overload

Many administrators implementing the internships in the districts
and the project's two associate directors experience overload as a result
of participation in Project ICES. Their major responsibilities within
their employing institutions demand time and attention. Their duties have
not been decreased in proportion to the time and energy needed to implement
the internships.

This overload is heightened by the extra effort required to overcome
the liabilities of newness and to reduce some of the ambiguity of the
project. As a result, they are not free to engage in the extensive
formal and informal interaction which could reduce uncertainty about the
project. When individuals face more demands than they can meet, they
tend to resolve such overload by giving priority to tasks that are clearly
defined over those that are unclear and to demands coming from their

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Immediate co-workers rather than from more distant sources. The project's marginality virtually assures that under conditions of overload, ICES tasks will be deferred, done hurriedly, or ignored.

The combination of overload and project marginality in particular has led to deferred decisions. When administrators are in the midst of teacher negotiations, budget planning or other important activities, they delay consideration of disposition of interns. While this has not created major difficulties, the delays have been minor irritants for administrators and were sources of anxiety for interns. In larger districts there has been occasional confusion when interns move from one assignment to another because administrators have not met or communicated with each other.

Asymmetrical Interdependence

The inter organizational structure was established under the assumption that tasks could not be accomplished without the cooperation of all units. In relation to the ICES tasks, the units are interdependent. However, some are more dependent than others. When some units have little incentive to coordinate, there is potential for conflict. Other research has shown that such asymmetry leads to resentment among the dependent individuals (Dalton, 1959), leads the dependent individuals to make more attempts to influence the relationship with the independent unit (Walton and Dutton, 1969), or leads the dependent unit to attempt to interfere with the task performance of the other unit (Walton and Dutton, 1969). The conflict is greatest between those who cannot control the interactions or outcomes and those perceived as having control.

In the ICES structure, the school districts clearly are the most independent of the units. The district plays the crucial role in the

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success of the internship. All but one of the interns were selected by the employing school district to participate in ICES. The district provides the setting for the internship experiences. It is the interns' interactions with other administrators and the kinds of tasks they are allowed to undertake that comprise the major ICES experience. In the future, some interns may be employed as administrators or, in other capacities in their districts. Even those who plan to leave their districts rely heavily on the recommendations and communications networks of their cooperating administrators. Thus, the success of the program at every stage depends on the school district.

However, the districts do not depend on the ICES staff to the same extent. Some districts have operated their own intern programs, or have worked with administrative interns in the past and consequently, may not need the expertise of the ICES Executive Committee. Their faculties can take the coursework for certification without ICES. The only component that the districts cannot supply themselves or from other sources are the stipends paid to the interns for summer school and the funds provided interns during their internship year.

Districts may see some demands from other units as interference. A likely area of conflict is that between university requirements and school district needs and preferences. Allocation of academic credit for intern activities, the university's residence requirements, and reporting requirements for internships may create conflict. The intern who must meet the demands from both organizations faces role conflict. Under such conditions, the intern is most likely to resolve this conflict

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is by giving first priority to the district's preferences. Both university and district representatives must be sensitive to this pressure.

Loose Coupling

The project exemplifies the "loosely coupled system" (Weick, 1976). A loosely coupled system consists of units which retain their individual identity and are logically or physically separate from other elements. These units may be added or withdrawn from the system without disrupting it seriously.

ICES elements are coupled tenuously to a central unit—the Executive Committee. As described above, the Committee consists of a representative of the participating university, the state umbrella administrators' organization, and the state department of education and the coordinator. The ten cooperating school districts are joined to the structure by little more than the good will of their administrators and boards.

There are no organization-wide structures to reduce ambiguity. The project has been able to establish few general rules, policies or procedures that apply to all parts of the system. Each intern and each district is treated as a separate case. The project has no formal authority over participating school districts or interns. Any influence results from persuasion.

Loose coupling produced initial frustration, dissatisfaction with the project, and stress for the interns. Many expected to see clear authority relationships and quick decisions. When the project did not get final decisions on intern placement in the districts before the end of the school year, participant anxiety increased.

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Weak Informal System

Because the project's components are separated by considerable distances, a cohesive informal system has not developed. Interaction between participants is infrequent. Interaction among several components is even less common. There are few opportunities for face to face interaction. Consequently, members of the organization do not develop the informal relationships and mutual understandings which allow individuals to predict outcomes and, in some cases, to establish a basis for mutual trust.

Project Conflict ·

Ambiguous goals and diverse perspectives, the liabilities of newness, the project's short life and marginality, participant overload, unequal dependence, loose coupling and a weak informal system create a setting in which ambiguity and potential for conflict are high, and in which there are few organization wide mechanisms available to reduce ambiguity and resolve conflict.

During the first ten months, some discord and dissension occured. The difficulty in hiring a coordinator has been noted. As intern assignments were discussed, varied perspectives on the kinds of experiences interns should have emerged. Project staff suggested that interns have at least one defined area of responsibility in which the intern could initiate and implement a course of action that resulted in a "product." Building level administrators were unenthusiastic about this requirement, as they often could not define anything extra that needed to be done and were unwilling to relinquish authority for any

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existing activities. They argued that nothing substantive could be done, and interns' time would be spent more usefully in learning the day to day routine of building administration.

Administrators responsible for working with interns in their home districts differed over the need for depth versus breadth of experience. Central office administrators tended to stress the importance of breadth of experience. They argued that the internship provides an opportunity to gain an overview of a district, its problems, and the full scope of administrative tasks. Individuals who enter administration without an internship rarely have initial exposure to district-wide concerns. In contrast, building level administrators tended to stress the importance of depth of experience. They perceived the internship as an opportunity for an individual to assume responsibility for many activities in a school. Some defined the position as similar to that of assistant principal. From this perspective, involving interns in any activities which remove them from the building reduces the principal's willingness to assign meaningful responsibilities to the intern. Consequently, as they began to plan their year, interns faced role conflict.

By the end of the project's first year, disagreements were less evident. Interns were working in their districts with little role conflict. No dissention was apparent within the Executive Committee. The project's objectives were being met and activities occured as scheduled. The initial disagreement and predicted conflicts were not evident. Examination of interaction and decision making suggested that loose coupling among organizational elements serves to reduce conflict.

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Loose Coupling and Conflict Reduction

Interaction among participants in the project became even less frequent than during the initial months. The Executive Committee has not met as a group in the past ten months. No choices have been defined as relevant to all members of the committee. Instead, choices have been made unilaterally by the director or coordinator after consultation with the appropriate member of the committee.

Formal occasions for group meetings are rare. Two "intern breakfasts" attended by interns and cooperating administrators have been held at the annual statewide administrators' conventions. Though some project information is given participants, these meetings are primarily social occasions. During the summer interns, some of their cooperating administrators, and project staff met. These sessions were a mix of socializing, meetings between individual interns and administrators and question and answer sessions. One group problem solving activity, a discussion of ways to limit intern role conflict, occured.

A project advisory council brings together individuals familiar with equity issues and education. This group has met twice during the project's eighteen month existence.

Administrators in the cooperating school districts have made the decisions about intern placement and activities. In only two cases was the director involved in placement decisions; in one case his role was to recommend guidelines, and in the other he played an active part because of his close ties with district administrators.

The interns' specific activities have been determined by each intern

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and the administrators with whom she works directly. The coordinator
provided a framework of suggested activities and project requirements.
Although all interns receive academic credit for intern activities, these
activities were determined with little reference to the director or
other faculty members.

Even within districts administrators tend to couple elements
of the internships loosely. Where interns divide their time between
schools and central office, administrators often have scheduled the
year so that there is little need for joint decision making. The most
popular schedule puts the intern in one setting at a time so that she is
only responsible to one administrator at any given moment. Only one
intern has attempted to combine central office and building level
activities for the entire year. Originally, the project had suggested
that each intern form a "support team" of individuals from different
areas and levels in the district to give the intern access to people
throughout the district and to help with planning and evaluation of
intern projects and responsibilities. In practice, this team serves
the intended functions only in small districts where the intern already
knew administrators across the district and/or where the internship is
concentrated in the central office. In the largest districts, where the
support team would be most useful to the intern, such a group either
has not been formed or does not meet.

Choices have been made by those most directly involved in an issue.
As a result, interns and cooperating administrators are satisfied. The
initial ambiguity and anxiety surrounding their participation has been

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resolved. With minimal role conflict and with a clear understanding of their responsibilities interns have worked enthusiastically and effectively at their administrative tasks. The coordinator's visits to participating districts serve the function of "ceremonial congratulation" (Willower and Guthrie, 1973). Meetings between coordinator, intern and administrators maintain the sense of belonging to a common organization and of participating in a mutual endeavor. Such interactions help to maintain the project as a "social reality" for interns and administrators.

As interns work energetically in their districts, they postpone project and university requirements. The more deeply involved in administrative activities interns have become, the less conscientiously they have attended to required reports of their activities. Those doing Masters theses have postponed topic selection and research as long as possible. They have not identified thesis topics which directly relate to their administrative responsibilities. They have defined academic requirements as separate from their administrative activities.

Project components were loosely coupled to the Executive Committee and to each other in the original design. However, participants appear to have consciously furthur loosened attachments to reduce both ambiguity and conflict. Whether measured by interaction rates, number of shared decisions, interdependence, or authority relationships, coupling has become weaker than assumed in the project's original structure. Linkages are affective--commitment to individual interns and general good will--rather than task related.

This loose coupling has allowed the organization to persist where

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conflict otherwise would have disrupted it. In addition, it has reduced the initial ambiguity which frustrated interns and, to a lesser extent, some of the cooperating administrators. Without taking other project elements into account, interns and their cooperating administrators have been able to negotiate satisfactory work arrangements and clarify roles and responsibilities.

This analysis suggests that in organizations where potential for conflict is high, formal conflict reducing structures (such as a hierarchy of authority) are absent, and participants lack time or opportunity to negotiate organization-wide agreements, components will be loosely coupled to any central unit and to each other. Loose coupling also will allow participants to define their roles, responsiblities, and relationships clearly and to maintain enthusiasm for their immediate tasks. When participants look to a central authority to reduce ambiguity and resolve conflict, they are disappointed, and they may report dissatisfaction, frustration and job related stress. A central unit or authority cannot meet those expectations. Loose coupling enables a conflict-prone organization to persist and to meet its objectives.

However, loose coupling also entails costs to the organization. The data from Project ICES contradict Weick's assertion that administrative costs should be low in a loosely coupled system. When administrators must make decisions with individual units serially, administrative costs will be higher than in organizations where standardized procedures or group decision making can be used. Project administrators spend considerable time in communication with other participants in order to maintain the

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organization. Consequently, the project's major expenses consist of administrative salaries and travel and communication costs.

This finding should not be surprising. Other studies have found that the size of the administrative component of an organization grows as the number of places in which work is performed increases, as role specialization and differentiation increase (Anderson and Warkov, 1961), and as both subordinates' and supervisors' task complexity increase (Bell, 1967). It seems probable that many loosely coupled systems will be characterized by specialized and differentiated roles, task complexity and multiple work locations. When activities do not require coordination, the task of administration becomes continuing the social construction of reality. The face to face interactions and frequent ceremonial congratulations involved in the social construction of reality are expensive.

Conclusions

The loosely coupled system has proved to be an effective structure for achieving Project ICES objectives. It allows flexible response to diverse client needs and career goals. It has accommodated a wide variety of school district policies and procedures. It has had a significant impact on the lives and careers of most interns.

However, the structure proved inadequate to resolve conflicts, reduce stress, and clarify ambiguity during the initial phases of the project. Consequently, components moved to loosen further their connections with the project. This strategy avoided conflicts and allowed problems to be resolved one at a time.

The experience in Project ICES suggests that the demands on project

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administrators are even greater than in an organization where elements·
are more tightly coupled by authority relationships, shared activities,
interdependence, or interaction. During the project's initial stages,
these demands are especially great. It is crucial that all central
administration positions be filled when the organization is scheduled
to begin its tasks. Administrative resources would be more effectively
allocated if concentrated at the beginning stages of such an organization.
At this stage, the liabilities of newness are greatest. To overcome
them, extra resources must be spent to establish a social system.

The final impact of this organization on the participating agencies
and on education in the state cannot be assessed until Project ICES
has been completed; however the project already has had an impact.
Although the loosely coupled system cannot effect great change on its
components directly, the organization promotes change indirectly. The
involvement of opinion leaders in a successful and popular program already
seems to have increased interest in administrative internships throughout
the state. Administrator requests about continuing the program and
enthusiasm about contributions interns have made in their districts has
led the university and the United School Administrators to plan a more
permanent administrative internship program. Thus it appears likely that
some elements of Project ICES will remain coupled even after federal
funds are terminated.

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References

Anderson, Alonso. "Combined Effects of Interpersonal Attraction and
    Goal-Path Clarity on the Cohesiveness of Task Oriented Groups,"
    Journal of Personality and Social Psychology, Vol. 31, No. 1
    (Jan., 1975), 68-75.

Anderson, Theodore and Warkov, Seymour. "Organizational Size and
    Functional Complexity: A Study of Administration in Hospitals."
    American Sociological Review, Vol. 26 (February, 1961), 23-28.

Bell, Gerald. "Determinants of Span of Control." American Journal
    of Sociology, Vol. 73 (July, 1967), 100-109.

Cohen, Michael D. and March, James G. Leadership and Ambiguity.
    New York: McGraw-Hill Book Company, 1974.

Dalton, M. Men Who Manage. New York: Wiley, 1959.

March, James G. and Simon, Herbert A. Organizations. New York:
    John Wiley & Sons, Inc., 1958.

Miles, Mathew B. "On Temporary Systems" in Miles, Mathew (ed.)
    Innovation and Education. New York: Bureau of Publications,
    Teachers College, Columbia University, 1964. pp. 437-490.

Raven, Bertram and Reitsma, Jan. "The Effects of Varied Clarity of
    Groups and Group Path Upon the Individual and His Relation to His
    Group," in Cartwright, Darwin and Zander, Alvin (eds.). Group
    Dynamics. 2nd edition. Evanston, Ill.: Row, Peterson, and
    Company. 1960. pp. 395-413.

Stinchcombe, Arthur L. "Social Structure and Organizations," in
    March James G. (ed.). Handbook of Organizations. Chicago:
    Rand McNally, 1965, pp. 142-193.

Thompson, James D. and Tuden, Arthur. "Strategies, Structures, and
    Processes of Organizational Decision," in Thompson, James D. and
    Tuden, Arthur, Comparative Studies in Administration. Pittsburgh:
    University of Pittsburgh Press, 1959.

Walton, Richard E. and Dutton, John M. "The Management of Inter-
    departmental Conflict: A Model and Review," Administrative
    Science Quarterly, Vol. 14, No. 1 (March, 1969), 73-83.

Weick, Karl E. "Educational Organizations as Loosely Coupled Systems,"
    Administrative Science Quarterly, Vol. 21, No. 1 (March, 1976), 1-19.

Willower, D. and Guthrie, J., "The Ceremonial Congratulation: An
    Analysis of Principals' Observation Reports of Classroom Teaching,"
    High School Journal, Vol. 56, (1973), 284-290.

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