Two large, complex organizations (an urban school district and a neighboring college of education of a major State-funded university) have developed and applied a collaborative model of interaction and resource enhancement in response to resource contradiction and environmental turbulence. This paper (1) presents a conceptual framework of organizations interacting with their environments in a tight/loose coupling mode; (2) describes the background, development, processes, and outcomes of the collaborative relationship; and (3) presents an analysis of the collaborative relationship in terms of the conceptual framework. Five targets of change are analyzed: presumptions of logic, socialization processes, differential participation, constant variables, and corruptions of feedback. The case history suggests that both organizations had to move to protect their respective technical cores and, to do so, elected to adopt bridging strategies to enhance resources and thus increase organizational legitimacy. (Author/KH)
UNIVERSITY/DISTRICT COLLABORATION ON EFFECTIVE SCHOOLS:
A Resource Enhancement Model

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During the past sixteen months, two large, complex organizations—an urban school district and a neighboring college of education of a major state-funded university—have developed and applied a collaborative model of interaction and resource enhancement in response to resource contradiction and environmental turbulence.

This paper: (1) presents a conceptual framework of organizations interacting with their environments in a tight/loose coupling mode, (2) describes the background, development, processes, and outcomes of the collaborative relationship, and (3) presents an analysis of the collaborative relationship in terms of the conceptual framework.

I. CONCEPTUAL FRAMEWORK

In recent years, organizational theorists have moved away from a preoccupation with rational systems and toward developing an understanding of organizations as open systems interacting with their environment (Scott, 1981; Weick, 1982). Theories of organizations as rational systems tend to assume that structural arrangements within organizations are tools deliberately designed for the efficient realization of goals. As noted by Scott (1981), considerable emphasis is placed in the rational system perspective on control—the determination of the behavior of one sub-unit of participants by the other. "Decision making tends to be centralized, and most participants are excluded from discretion or exercising control over their own behavior" (Scott, 1981, p. 77). The notion of rationality, then, resides in the structure of the organization, not in individual participants within the organization, and not in the interdependencies of organizational/environmental exchange.

The change in perspective from rational systems to an image of organizations as open systems entails considerably different assumptions. Scott (1981, p. 119) notes that the "open systems view of organizational structure stresses the complexity and variability of the individual component parts—both individual participants and subgroups—as well as the looseness of connections among them. The system is multicephalous, with many heads present to receive information, make decisions, and direct performance. Organizational subgroups are fluid, with individuals and subgroups forming and leaving. System boundaries are seen as amorphous; designation of actors or the relationship of their actions to the
organization or the environment often seems arbitrary and seems to vary depending on what aspect of the system is under consideration.

Within the open systems perspective, organizational theorists have developed as foci (1) the exchange relationship between organizations and environments, and (2) the internal nature of organizations as related to organizational change.

Exchange Relationship

In recent years, several models have been developed which give primary attention to the environment as a set of influences shaping the structure, function, and fate of the organization. The environment of an organization is composed of those agencies or forces that affect the performance of the organization, but over which the organization has little or no direct control (Churchman, 1968, p. 36).

As identified by Aldrich and Pfeffer (1976), there are two distinct subtypes of models that give primary attention to the environment: the natural selection model and the resource dependence model. The natural selection model originated with the work of Darwin; this model has limited usefulness here, as it views organizations as populations rather than as individual organizations. The resource dependence model has been variously described as the political economy model (Zald, 1970; Wamsley & Zald, 1973), and as an exchange or power-dependency model (Thompson, 1967; Jacobs, 1974).

The resource dependence model stresses adaptation processes and serves as the focus of most of the work which examines organizational-environmental connections. It assumes that "subunits of organizations, usually managers or dominant coalitions, scan the environment for opportunities and threats, formulate strategic responses, and adjust organizational structure appropriately" (Hannan & Freeman, 1977, p. 930). Boundaries of organizations are considered as sieves, not shells, admitting the desirable flows and excluding the inappropriate or deleterious elements (Scott, 1981).

Also bearing on the model is the notion of legitimacy. By legitimacy, we mean the capability of an organization to neutralize environmental constraints and mobilize environmental resources to enhance attainment of organizational goals (Andrews, 1974; Andrews, Soder, & Eismann, 1974). Neutralization of environmental constraints (laws, rules and regulations, pressure group desires) and the mobility of resources (bridges that result in contracts, mergers, associations, or institutional linkages), provide the basis for determining the level of operational resources and freedom for organizational action. The more unlimited the resources and the more unencumbered the freedom for organizational action, the more legitimacy the organization enjoys within its environment.
Legitimacy, as defined here, is also related to the enhancement of the organization's technical core. The technical core is composed of the arrangements developed to perform the central set of tasks around which the organization transforms inputs into outputs, including the skills of personnel employed to carry out those tasks (Scott, 1981). It has been suggested that organizations seek to seal off their core technologies from environmental influences (Thompson, 1967); they do so using a variety of buffering strategies. Such strategies include coding, stockpiling, leveling, forecasting, and change in scale of operation or growth. Under conditions of plentiful resources, these strategies appear to work quite well. However, under conditions of diminishing resources, the strategies of growth and stockpiling are not available. The remaining strategies, i.e., coding (increasing screening mechanisms), leveling (advertising to obtain more resources) or forecasting (scaling down service delivery) do not provide much promise for maintenance of essential resources to protect the technical core. It is under conditions of declining resources that organizations may be more likely to turn to bridging strategies designed to increase organizational interdependence on the environment or selected parts of the environment; such strategies as bargaining, contracting, joint ventures, mergers, associations, and institutional linkages focus on increasing and/or enhancing existing resources.

Organizations and Organizational Change

According to Berger (1981), to manage change in a rational system perspective, it is assumed that if relevant information is gathered to define the problem properly and if the resistance to recalcitrant parties is overcome, then a decision can be made that will correct any problems. In this view, a fairly stable group of decision makers who agree on goals and technology, manage change. The targets for change from a rational perspective are goals, procedures, rules, controls, and structure.

Considered from an open-systems perspective in terms of loosely coupled systems (Weick, 1982), to manage change and to ensure that the resulting change will have substance, the targets for change are somewhat different. Miller (1978) suggests that we consider systems as "a set of interacting units with relationships among them. The word 'set' implies that the units have some common properties. These common properties are essential if the units are to interact or have relationships. The state of each unit is constrained by, conditioned by, or dependent upon the state of the other units. The units are coupled" (p. 16).

The coupling between or among units can be either loose or tight, with the nature of the coupling determined by five characteristics (Weick, 1982):
As such, traditional targets for change--e.g., goals, procedures, rules, control, and structure--become open to debate. Further, considered in a tight/loose perspective, systems not only function within an environment, they have key organizational/environmental connections (Pfeffer & Salancik, 1978; Scott, 1981; Andrews, 1983). Pertinent, too, is Miller's discussion of integration (1978, pp. 109-110). Miller argues that as size, number of units, and complexity increase, organizations reorganize into semi-autonomous, decentralized components acting on information that is partly segregated: "As a system grows and adds more components, the components in general become increasingly independent in decision making" (p. 109).

As noted by Weick (1982), most change models rely heavily on connections, networks, support systems, diffusions, imitation, and social comparison--none of which "are plentiful in loosely coupled systems." Rather, Weick argues, there are five properties of loosely coupled systems that are crucial for system functioning and thus important targets for change: (1) presumptions of logic, (2) socialization processes, (3) differential participation, (4) constant variables, and (5) corruptions of feedback.

Presumptions of logic. Core beliefs, or presumptions of logic (Weick, 1982) or logic of confidence (Meyer & Rowan, 1977) or community of assumptions (Etzioni, 1968) are crucial underpinnings that hold loose events together. The undermining of these assumptions produces doubt, which may, as Weick suggests, be "a much more severe change intervention than most people realize" (p. 21).

Socialization processes. Weick (1982) suggests that "explicit internal controls, which are the essence of tight coupling, can be relaxed if organizational members are homogeneous at the time they assume their jobs or if they mingle and know one another sufficiently so that they can anticipate the moves of one another and coordinate actions at a distance" (p. 394). Common premises for dispersed decision making are implanted by socialization; as such, to change a loosely coupled system is to resocialize people away from provincial views toward more comprehensive and more accurate views of different segments of the organization.

Differential participation. Pfeffer (1978) notes that "organizations are loosely coupled, in part because few participants are constantly involved or care about every dimension of the organization's operation" (p. 37). Change becomes problematic in a loosely coupled system when one

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\begin{array}{ccc}
A \text{ affects } B & \text{Loose Coupling} & \text{Tight Coupling} \\
\text{suddenly} & \text{continuously} \\
\text{occasionally} & \text{constantly} \\
\text{negligibly} & \text{significantly} \\
\text{indirectly} & \text{directly} \\
\text{eventually} & \text{immediately} \\
\end{array}
\]
person becomes more closely coupled with issues and analysis and in doing so makes it harder for others to gain access to the decision-making process. To change a loosely coupled system is to introduce changes in agendas, topics, and meeting patterns (Weick, 1982).

Constant variables. Loose coupling may occur because variables in a system become constant and, as Ashby suggests (1960, p. 169), "constancies can cut a system to pieces." Variation can be restored by widening the tolerance limits of the constant variables, by introducing lower standards of performance, and by circumvention through introduction of new linkages into the system to reverse direction. Institutionalizing and legitimating the new linkages while ignoring the original system may produce variation (Weick, 1982).

Corruptions of feedback. Feedback is a conventional strategy for inducing change (Block, 1981, chapters 12 & 13). In loosely coupled systems, flawed feedback results in looser couplings formed between actors and between actions and consequences. More particularly, feedback is neutralized, resulting in a decoupling of action from environmental consequence and from the actions of other individuals (Weick, 1982). To change loosely coupled systems requires either avoidance of feedback, at least initially, or "overkill" to avoid the discrediting of feedback that is given (p. 403).

Having thus summarized, albeit briefly, aspects of the open systems perspective in terms of organization/environment exchange relationships and the resource dependence model, and in terms of targets for change within the framework of tight/loose coupling of systems, we present a case history of two large complex educational organizations--a school district and a neighboring college of education of a major university. The case history outlines the interrelationships between the two organizations and their environment under conditions of contraction, turbulence, and resource reduction, and discusses the processes by which a resource enhancement model has been developed under such conditions. An analysis of the case history is then presented in terms of the conceptual framework outlined above.

II. CASE HISTORY

General Background--District

The district under consideration is located in a large urban area. Some 44,000 students are enrolled in the district's 99 schools; they are served by approximately 2,800 FTE certificated employees and some 1,400 classified employees.
There have been significant changes in the number and needs of the students over the past twenty years, and particularly over the last decade. Enrollment peaked at 100,000 in 1962 and, as was the case in many school districts throughout the nation, began a precipitous decline shortly thereafter. In 1970, student enrollment was approximately 65,000; by 1985, enrollment is projected to drop to some 42,000 students.

In the last four years, enrollment of "regular" students has declined 17 per cent; however, specific subpopulations with special needs have increased. Special Education students show a 22 per cent increase over the past four years. During the same period, students qualifying for gifted programs have increased 29 per cent, and bilingual student enrollment has increased 15 per cent.

During the last ten years, the pupil/certificated ratio has changed from 16.1:1 to 14.7:1, while at the same time, the pupil/classified ratio has changed from 22.4:1 to 28.9:1. FTE employment has fallen from 6,920 in 1974 to 4,248 in 1984.

Within the city, some 31 per cent of the families have only one parent; among the district's students, some 42 per cent come from single-parent homes. Within the city between 1970 and 1980, the nineteen-and-under population declined from 156,000 to 105,000. Minority enrollment, however, has continued to increase from approximately 15 per cent of the enrollment in 1964 to some 50 per cent currently.

The decline in enrollment led to a major district effort to close schools. In the last several years, some 18 elementary schools have been closed, along with two middle schools and two high schools. The process has been controversial: during the mid-1970s, community groups mounted a successful legal challenge to the school closure process.

The increase in ethnic minority enrollment led to an increased focus on the phenomenon of segregated schools. In 1977, with broad community involvement, the district developed a plan to desegregate its schools without court order or federal government intervention. Implementation of the plan, involving the mandatory assignment of thousands of students, consumed a large share of the district's time and resources. The desegregation plan was challenged in court; in June 1981, the U.S. Supreme Court struck down a state law designed to dismantle the desegregation plan.

The turbulence reflected in declining enrollments, school closures, and reductions in staff, has thus been coupled with turbulence reflected in an increasingly larger minority student population mandatorily assigned to schools as part of the desegregation plan, with changes in assignment increasingly due to closures of schools.

During the last several years, the district has experienced major changes in the pattern of school finance, with a drastic reduction in
federal monies and a shift from local property tax levy support to state funding. Although the overall district budget has grown, the changes in financing combined with the increased special population needs have resulted in a decline in resources.

General Background--University

The university under consideration is a state-funded institution enrolling some 34,000 students in undergraduate and graduate programs. During the 1960s and 1970s, enrollment increased each year, with a concomitant increase in operating funds and capital expenditures. The university is a major research institution; grants and contracted research monies totaled more than $256 million during the 1981-83 biennium.

During the 1960s and 1970s, the college of education of the university had as its major focus the preparation of elementary and secondary teachers and administrators. In response to demand, preservice (undergraduate) enrollment was 2,221 in 1970; graduate enrollment was 724 during the same period. By 1975, enrollment decline was clear, with 923 students enrolled in undergraduate programs, although graduate enrollment increased to 941 students. Project enrollments for the fall of 1984 suggest a population of 325 undergraduate students and 800 graduate students.

The overall decline in enrollment and the proportionate shift from teacher and administrator preparation to a focus on research is reflected in changes in faculty appointments. In fall, 1983, the total FTE faculty (regular appointments, dean's reserve, auxiliary teachers, and teaching assistants) was 89.39, significantly below the 1970 FTE count of 95.81. However, the number of full-time instructors and tenure-line faculty members increased from 64.58 FTE in 1970 to 76.0 in 1980, while the budget for auxiliary teachers declined sharply.

Major cuts in the college of education budget were made in October 1979; June 1980; November 1980; November 1981; and February 1982. Between October 1979 and February 1982, the college lost 9.47 support staff, and by 1985 the faculty is projected at a low of 58 FTE. Thus, during the past several years, college FTE's have been cut, some degree programs have been eliminated, and the college's areas or departments have been consolidated with three of the areas merged into one.

In sum, both the district and the university have experienced (albeit over slightly different time periods due to the gradual aging of the postwar baby boom generation) growth over a long period of time, followed more recently by decline in resources and changes in client needs and institutional focus, with the decline and changes accompanied by shifts in organizational structure and process.
As suggested earlier, both organizations function in their environments, and are dependent at least in part upon their environments for resources and support. We now turn to a description of the inter-relative response of both organizations to the phenomenon of declining resources during a time of contraction and environmental press.

Collaborative Relationship--Background

In a general sense, educators at both the district and the university have as a shared focus the development and maintenance of effective schools. An integral part of that focus is the creation and transmission of knowledge pertaining to education and the schooling process. Continual expansion of new knowledge suggests the need for on-going personal and professional development of educators at both institutions. At the same time, successful expansion of new knowledge is in large part a function of application and testing of theories, ideas, techniques, and approaches in public school settings. Accordingly, the expansion of new knowledge potentially useful to the development and maintenance of effective schools is dependent upon a collaborative relationship between the district and the university.

However, prior to two years ago, the major focus of the relationship between the district and the university has been on preservice training of teachers and administrators. This relationship, while useful, has by its nature tended to center on aspects of internship programs and placement rather than on research and development efforts per se. To be sure, there have been some research and development efforts: some faculty members have entered into consultative relationships with the district on specific research projects; some faculty members have given many hours of voluntary assistance and made available on a gratis basis their research expertise. Nonetheless, these activities have been conducted on an individual basis, rather than within the framework of an institution-to-institution relationship.

The lack of an institutional relationship, combined with the fact that the two institutions have traditionally performed different, if related, functions, has contributed to a general mutual perception of aloofness. As in other parts of the country over the years, many public school professionals have felt that university faculty efforts are irrelevant to the "real life" difficulties of day-to-day public school teaching and administration. Many university faculty have perceived public school professionals as overly pragmatic and seemingly uninterested in questions of conceptualization, theory building, and research.

Thus, while the general notion of collaboration has appeared useful as a general notion, such collaboration has been difficult to achieve in practice.
Collaborative Relationship—Establishment

In early 1982, the district established the Effective Schools Project, with the goal of ensuring that each child would have access to an instructionally effective school. As defined by the district, such schools are productive both in terms of student outcomes and in developing and maintaining certain organizational characteristics.

In terms of student outcomes, it is expected that all students will exhibit mastery of basic academic skills and will seek academic excellence in all subject areas. Outcome data—norm-referenced test scores—are to be analyzed by student ethnicity, socioeconomic status, and gender; such analyses will serve as checkpoints to ensure that all students, rather than just selected groups of students, are being served.

In terms of organizational characteristics, it is expected that all schools will reflect (1) clear goals, (2) strong leadership on the part of the principal, (3) dedicated staff, (4) high expectations, (5) frequent monitoring of student progress, (6) early identification of student learning difficulties, (7) positive learning climate, (8) student time on task, (9) curriculum continuity, (10) multicultural education, (11) effective communication, and (12) parent/community involvement.

Both the student outcomes and the organizational characteristics were articulated through a decision seminar process. The decision seminar group was composed of three teachers, three building principals, two central administrators, one member of the board of directors, and one community representative. The seminar met for three weeks in all-day sessions. During the first week, members reviewed the literature; during the second, they heard testimony from some eighty citizens and community group representatives; during the final week they synthesized information obtained and produced a summary of findings and recommendations to be submitted to the board of directors. One month later, the board of directors adopted effective schools policies based on the recommendations in the report. Implementation of Board policies was delayed until fall 1982, pending the appointment of a new assistant superintendent for curriculum and instruction.

It should be noted that a number of urban school districts have embarked on "effective schools" projects during the last several years. The district's project is similar to these efforts, in specifying academic outcomes and a given set of associated organizational characteristics. There are, however, two aspects in which the district's project differs: (1) the district expects participation of all schools, rather than involvement of selected schools, and (2) the district's project was planned with the intent of making creation, application, and diffusion of research knowledge an integral part of the effort.

Considering the system-wide, research-based scope of the project, the
superintendent sought assistance in project implementation from institutions with acknowledged expertise in school effects research. After discussions with members of four such institutions, the superintendent decided to establish a primary link with the university in question: the decision was based on availability of research expertise, an expressed willingness on the part of both the district and the university to commit resources to the project, and geographical proximity.

Following further discussions among the superintendent, the dean of the university's college of education, and other representatives of both institutions, a Memorandum of Understanding was developed in February 1983; it was signed by both parties in June 1983. The memorandum established the basic guidelines under which university and district personnel would work collaboratively in the conduct of research and development activities pertaining to the project over a three-year period. The guidelines focused on (1) decision-making control, (2) access to data, (3) review of research proposals, (4) inservice and credits, and (5) property rights.

In terms of decision-making control, it was agreed that "the extent to which practices and procedures recommendations made by the university are accepted, rejected, and/or modified by the district is at the discretion of the district, through the assistant superintendent for curriculum and instruction."

It was agreed that there would be a joint access to aggregated data provided upon specific request, with individual subject data to be provided by means of standard human subjects review processes. With regard to review of research proposals, it was agreed to establish a joint review committee, "to facilitate timely processing of research proposals. With regard to inservice and credits, it was agreed that admission to the university and applications for awarding university credits for inservice training would be considered in accordance with regular university procedures. With regard to property rights, it was agreed that "all instruments, inventories, and other materials developed by university personnel in connection with work on the Effective Schools Project will remain the joint property of the district and the university unless expressly agreed to the contrary prior to the start of any given portion of the work."

In addition to the formal linkage of the memorandum of understanding, linkages were established in other ways. The district's superintendent formally assigned administrative responsibility for the project to the assistant superintendent for curriculum and instruction. The dean of the college of education assigned administrative responsibility to the chairperson of one of the college's areas. Further, both the district and the university agreed to employ a full-time liaison person, with the district assuming two-thirds and the university one-third of the associated costs.
Collaborative Relationship--Process and Outcomes

As indicated above, the seminar group recommendations and board of
directors policies included a definition of an effective school as having
certain student outcomes along with twelve organizational characteristics.
A major portion of the work conducted through the collaborative relation-
ship between the district and the university has, over the past sixteen
months, centered on the twelve characteristics.

The recommendations and policies spoke only in general terms as to the
characteristics. As such, the implementation plan for the entire project
included three objectives: (1) develop a precise definition for each
characteristic, (2) develop or identify instruments to measure the extent
to which each characteristic is present in each of the district's schools,
and (3) develop procedures for assessment.

To meet these objectives, twelve subgroups, corresponding to the twelve
characteristics, were established by the assistant superintendent for
curriculum and instruction and the university's Effective Schools Project
representative. Each subgroup consisted of several university faculty
members and district representatives who were assigned to the several
subgroups on the basis of research expertise and expressed interest.
Participation in the project was entirely voluntary on the part of univer-
sity faculty. District representatives were assigned to the project, but
could choose the particular subgroups they wished to join. Where necessary,
participants were given release time, with the university providing others
to teach courses taught by faculty participants, and the district providing
substitutes for certificated non-supervisory personnel.

One faculty member and one district representative were designated as
co-heads of each subgroup; collectively, the subgroup co-heads served as
members of an overall task force on organizational characteristics. The
co-heads were jointly responsible for calling meetings of their subgroups
and for maintaining communication between subgroups and the task force.
The task force was chaired jointly by the assistant superintendent and the
university's representative.

During initial meetings of the Task Force and the several subgroups,
concerns were expressed that there were too few district representatives in
comparison to the number of faculty members involved. In response to these
concerns, the assistant superintendent appointed additional subgroup
representatives from the district. All told, after the expansion, the
subgroups included 19 university faculty; 36 district representatives were
involved, including 13 teachers, 12 building principals, and 11 central
office administrators, curriculum consultants, and helping teachers.

Each subgroup met on numerous occasions to develop a precise definition
for their particular characteristic. During initial meetings of the sub-
groups and the task force, several members indicated disagreement with the
general guidelines provided for their characteristic and, in some cases, disagreement with the particular set of 12 characteristics articulated by the district. Subgroup and task force members were told that they were to elaborate and expand upon the general guidelines provided for each characteristic, but that the initial 12 characteristics articulated by the decision seminar group and the board of directors were to be left intact.

In due course, draft definitions were produced by the subgroups and shared with the overall task force. Some of the recommended definitions were accepted by the task force without change; in other cases the task force suggested revisions, resulting in additional meetings of those subgroups, with the co-heads serving as intermediaries between subgroups and the task force. In all cases, it was understood from the outset that the subgroups would make recommendations to the task force; the task force, in turn, would recommend definitions to the assistant superintendent of the district for final approval.

In March 1982, the original district seminar group was reconvened by the superintendent to review overall progress of the project, and more specifically to review the draft definitions developed by the university/district groups. The task force met in an all-day session with the seminar group. In the case of some of the twelve characteristics, there was agreement between the two groups; in other cases there was disagreement, with some seminar members expressing concerns that the collaborative group's definition did not follow the intent of the original guideline. The seminar group issued a report outlining the areas of disagreement, and in subsequent meetings of the task force—and consequently the subgroups—efforts were made to ensure that the definitions enhanced, rather than detracted from, the original intent, while at the same time ensuring that the definitions were to the greatest extent possible based on findings from the research literature.

A final set of recommended definitions were submitted by the task force to the assistant superintendent; these recommendations were accepted by the assistant superintendent during the summer of 1983. Beginning in fall 1983, the subgroups began meeting to develop or identify instruments to measure the characteristics as defined. Again, the same process was used, with subgroups making recommendations to the task force and subsequent acceptance or suggestions for change being made by the task force. In the case of all twelve characteristics, it was concluded that instruments needed to be developed; in the opinion of the subgroup members and the task force, there were already-existing instruments appropriate for the assessment of the characteristics as defined.

Following administration, data obtained will be analyzed and summarized on a school-level basis. During workshops in August, each principal will receive a school profile book which will include academic achievement data analyzed in terms of a given school's student ethnicity, SES, and gender, along with the data regarding the twelve characteristics, indicating a
given school's position relative to district-wide averages and ranges for that type of school. Workshops and seminars will be conducted throughout the 1984-85 school year for principals and school staff members wishing to work on enhancement of given characteristics. The workshops and seminars will be a joint district/university effort, with university faculty providing, for each characteristic, a theoretical context and review of the literature, and district technical staff and selected principals and teachers providing a pragmatic focus on how to enhance that characteristic.

Drafts of instruments were developed and accepted by the task force by mid-December 1983. Given the relatively large size of the task force (12 co-heads of the subgroups, plus additional district administrators, along with the two co-chairs), and given the timeline calling for district-wide administration of the instruments in the spring of 1984, it was decided that a small working group of district and university representatives would meet on a regular basis to coordinate instrument production, pilot testing, and district-wide administration.

During late December, the working group began synthesis of the various instruments and developed the implementation plan for pilot testing of the instruments, subsequent refinement as necessary, and administration of the several instruments to all teachers, all principals, selected central office administrators, all students, and all parents. Pilot testing is taking place as of this writing; administration district-wide is scheduled to take place during May of this year.

Concurrent with the effort to define characteristics and develop appropriate instruments, a separate group of 14 university faculty members and 12 district representatives was convened by the district's assistant superintendent for curriculum and instruction, the university's director of the project, and the associate dean for undergraduate and professional studies of the college of education. The purpose of the group was to recommend a structure for interaction between the university and the district that would enhance joint research, development, and training efforts in light of changing conditions affecting both institutions.

After numerous joint meetings, the group proposed a new structure for interaction entitled the Institute for Effective Schools, which, in the opinion of the group, would better enable both the district and the university to meet their respective commitments to deliver instructionally effective schools. As proposed by the group, and as accepted by the dean of the college of education and the assistant superintendent of the district, the purpose of the institute is to enhance the "creation and application of new knowledge through communication, interaction, and information exchange between the university and the district, focusing on the areas of (1) preservice and inservice training of teachers and administrators, (2) research, (3) curriculum development, and (4) demonstration and dissemination of practices that produce instructionally effective schools. The proposal for the institute is being considered by private groups for funding to enable initial implementation.
Collaborative Relationship--Responses

Responses to the processes and outcomes of the collaborative relationship have been, and continue to be, varied within the district, the university, and the larger community.

District. Some district representatives working on either the definitions and instruments for the twelve characteristics of the Institute for Effective Schools proposal expressed early concerns ranging from the philosophical, e.g., differences with university faculty over ultimate values of schooling) to the somewhat more mundane (e.g., on whose "turf" meetings would be held). District building principals and teachers have expressed concerns. All told, the instruments developed through the collaborative relationship have considerable potential for provision of quality information to each school, information that any school staff can use in developing plans to better meet the needs of all students. At the same time, there is a perceived potential for the information generated by instrument administration to be used for personnel evaluation. Despite assurances by the district that the information obtained will be used solely for school improvement on a school-level basis, teachers both individually and through their bargaining unit have called for written assurances of anonymity and protection. In like manner, some principals have expressed concern about potential use of the data for personnel evaluation.

Community. The collaborative project and its products to date have not surfaced as an issue of major community concern. One group--the coordinating body of the local PTSA's--has expressed concerns and brought questions to the district's superintendent. As with the teachers and principals, many of these concerns and questions center on the perceived potential use of the data obtained to penalize individual educators. Concern has also been expressed by the group regarding the perceived role of the university in the project; despite dissemination of the memorandum of understanding between the two institutions, the perception remains among some members of the group that the university is determining policies and procedures over the protests of the district and the community.

At the same time these concerns have been expressed by the district, the university and the community, there have been general expressions of support from members of all three groups, with many people noting that at long last the state's largest district and its largest university have begun to work together. The hundreds of hours of interaction over the past sixteen months has led to greater mutual understanding of problems, issues, and concerns: the relationship between the university and the district, both on institutional and personal levels, is becoming grounded in a sense of shared purpose. The process has been complex, demanding, and time consuming. There have been major difficulties--difficulties in establishing trust relationships, difficulties in communication, difficulties over role function and organizational jurisdiction.
These difficulties notwithstanding, the relationship between the district and the university has been established, both on a formal and an informal basis. It is a new relationship, significantly different in structure and role definition. As this relationship matures over the next several years with continued and increased interaction among participants, there is a reasonable hope that the efforts to establish the relationship will be repaid many times over in terms of positive educational outcomes for both institutions, for students, and for the larger community.

III. ANALYSIS

In general terms, the above case history suggests that both the district and the university had to move to protect their respective technical cores--teaching student learning in the district and research, teaching, and service in the college of education. Each had two basic policy alternatives: to buffer their technical core against the turbulence in the environment due to contraction and changing conditions, or to adopt bridging strategies.

The case history suggests that both organizations elected to adopt bridging strategies to enhance resources and thus increase organizational legitimacy. Although the bridging strategies were formalized through a memorandum of understanding and the establishment of a full-time liaison function, bridging and consequent boundary spanning were considerably more extensive, with 33 faculty members and 48 district staff involved over a sixteen-month period in the development, production, and review of definitions, instruments, proposals.

Those participating thus became occupants of boundary role positions and, as noted by Hearne (1983), such positions have distinct roles and characteristics which are different from those internal to an organization. The participants as boundary spanners or liaisons were susceptible to a high degree of role conflict, and they were operating in situations where formal authority was blurred. It is not our intent here to discuss the motives and behaviors of individual participants, but rather to suggest that while some participants accepted their new role, other participants expressed discomfort with the dual role and subsequently withdrew from the project. A majority of participants, nonetheless, has remained with the project and individuals have indicated satisfaction with their roles.

A still larger majority suggests that sources have been enhanced. For its part, the district has obtained clarification of its specified twelve characteristics of effective schools and instruments to measure those characteristics. For its part, the university has gained assurances of
access to the immense amount of data to be generated through administration of the jointly developed instruments. For its part, the district appears in the eyes of the community--and more specifically in the eyes of the state legislature--to be willing to deal with the problems of urban public education and to be willing to use heretofore unconventional resources (i.e., the college of education) to focus on those problems. For its part, the university appears in the eyes of the community and the legislature to be willing to forego maximization of internal resources and willing to enhance its research capabilities while meeting its service obligations to the community.

It should be noted, however, that while bridging and boundary spanning have taken place and resources have been enhanced for both organizations, we suggest that in several major respects boundary maintenance has prevailed. It will be noted in the case history that although informal collaborative relationships were begun early in 1983, the formal memorandum of understanding was not accepted by both organizations until June of that year, some six months following the establishment of the subgroups and the joint task force. The six months of interaction notwithstanding, the memorandum guidelines make it clear that the university's role is to be one of recommending practices and procedures, and the extent to which recommendations are accepted is at the discretion of the district. Thus, while there was a willingness on the part of both organizations to blur boundaries, share resources, and place participants in dual roles with organizational support, basic decision-making authority remained with the district. It should be further noted that in discussing with the teachers' bargaining unit the terms and conditions under which the project data shall be obtained, analyzed, and disseminated, the district's discussion team has been composed solely of district representatives, with no university participation; the university will not be a party to the letter of agreement outlining terms and conditions. For its part, the college of education has made it clear in the memorandum of understanding that the college will retain control over admissions and awards of credits for inservice training.

As such, it can be argued that although boundary spanning in general was acceptable to both organizations, such acceptance was limited and did not encompass areas deemed vital by either organization.

Organizational Change

In the first section of this paper we noted five targets for change in loosely coupled systems; we now turn to a presentation of those five targets in terms of the events outlined in the case history and a discussion of the extent and process of organizational change.

Presumptions of logic. As Weick suggests, undermining of assumptions may be a severe change intervention. A core aspect of the district/
university project has been such undermining. Prior to the project, student test scores on nationally normed tests were reported on an aggregated school-by-school basis only. Overall, test scores were considerably above national averages. With the advent of the project, the district analyzed the same data in terms of student ethnicity and family socioeconomic status; the results, disseminated to the public, revealed wide discrepancies in terms of ethnicity and SES. Such data, coupled with the decision seminar's insistence that all schools must exhibit the twelve organizational characteristics of effective schools, produced doubt—both in terms of how well the schools were teaching students and in terms of how individual schools would compare vis-a-vis relative presence of the twelve characteristics.

Socialization processes. Given that the instruments to measure presence of the twelve characteristics have not yet been administered, our remarks here are limited to the anticipatory. As is indicated in the case history, there has been considerable opposition to perceived "ranking" of schools on the basis of characteristics. Past district practices encouraged leveling of performance, with little differentiation. The district/university project, however, implies considerable differentiation, with data obtained on the twelve characteristics linked to academic achievement data disaggregated in terms of ethnicity, SES, and gender on a school-by-school basis.

Project plans call for presentation of a given school's data to each principal at the end of August, with subsequent principal presentations to the principals' respective staffs at the beginning of the school year. At the same time principals receive their data, they will also spend an inservice day discussing means by which their schools can improve apparently weak organizational characteristics. Such means are slated to include all-day workshops involving university faculty with expertise in a given characteristic and also involving selected district principals and staff members who have dealt, apparently successfully, with the same given characteristic. These on-going workshops, conducted jointly by the district and the university, will provide major opportunities for resocialization.

Differential participation. As noted in the case history, some 48 district staff members have been involved in the project. Previous district practice had been to involve district technicians with university faculty members from time to time regarding specific research projects, while leaving teachers and principals and most central office administrators their traditional roles. With the advent of the district/university collaborative project, teachers, principals, and administrators assumed a liaison role as boundary role occupants. Such participation, provided with the support of the district, reflects considerable differentiation, and the essential elements of the project have a reasonable potential, for participant internalization and communication to colleagues.
Constant variables. The difficulty in assessing impact on this target for change lies in the difficulty in identifying particular variables that have become hard-programmed; the distinction between loose- and hard-programmed variables is sometimes an arbitrary one. In our view, the evidence here suggests that at least three variables had become hard-programmed in recent years: analysis of student test score data, data pertaining to school characteristics, and provision of data on a school-level basis. As indicated above, project plans call for disaggregation of student test scores in terms of ethnicity, SES, and gender of students; such disaggregation represents a considerably loosening of the variable. Data regarding the twelve characteristics had heretofore not been collected in a systematic manner. Data that had been collected had been obtained not through line administration, but rather through ancillary channels. Collection and school-by-school reporting of data pertaining to the twelve characteristics represent considerable loosening of variables.

Corruptions of feedback. Again, given that the instruments have not yet been administered district-wide, we cannot assess the feedback process and the response to that process. The projected plan calls for dissemination of information to the principals and, through the principals, to the several school staffs, beginning with principal workshops during August of this year. The data obtained will be presented and discussed at length by a combination of university faculty, district technical staff, and district line administrators. Workshops during the forthcoming years will be conducted by a combination of university faculty members in specified areas of expertise, district technical staff members, and principals and teachers in schools showing successful experience in dealing with and enhancing a given characteristic.

The analysis of the case history suggests that the conduct of the project has had some impact on three of the noted targets for change, viz., presumptions of logic, differential participation, and constant variables. In the case of resocialization and corruption of feedback, actual implementation of the project with regard to dissemination of data and follow-up work will not begin until late summer and early fall; as such, although project plans have been communicated on numerous occasions to the corps, assessment of the impact on these latter targets cannot be made at this time.

In our view, consideration of the project in terms of the targets for change articulated by Weick remains problematical. The distinctions between the targets for change are not at all clear-cut. A presumption of logic may also at the same time be a constant variable, and both may at the same time encompass patterns of participation. In the same way, provision of feedback may be viewed as resocialization, and both may be viewed as one (or more) of the other three targets. We suggest that all five of the targets involve indistinct aspects of the more general notion of information flow, and the demarcations of targets are somewhat arbitrary.
Concluding Comments

In a larger sense, the case history and analysis suggest, at most, the need for further thought rather than resonant conclusions. It may be that we might want to reconsider the tempting juxtapositions of goal-oriented vs. process-oriented frameworks or rational/closed vs. loosely coupled/open systems perspectives. Such juxtapositions may be useful in undermining our own presumptions of logical and constant variables (and it can be argued that these are targets as suitable for organization theory change as they are for organizations themselves), but are perhaps less useful as tools to increase understanding of how organizations actually work.

With this cautionary note, it may be that we can move beyond the limits of juxtapositions. In general, the open systems perspective appears to be more useful than the rational perspective in enhancing understanding of organizations. The case history and analysis—if not plain common sense—suggest that organizations do indeed interact with their environments and that they are indeed dependent upon their environments for resources. Further, it can be suggested that when responding to conditions of contraction and environmental turbulence, organizations can maintain their legitimacy within the environment either by adopting what appear to be (either to actors or observers) relatively low-risk and ultimately unproductive buffering strategies, or by adopting what might appear to be higher-risk bridging strategies. In the case considered here, it is our view that the district and the university in question eschewed buffering strategies in favor of bridging strategies and by doing so, maintained their legitimacy.

A delineation of the causes for the selection of the one strategy over the other is beyond the scope of this paper. Pertinent here is that the selection was made, and made with some benefit to both organizations. Immediate legitimacy was enhanced and, by sharing resources (conceivably counter-productive in a rational systems perspective), the potential for long-term legitimacy of both organizations has been increased.

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References


