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ABSTRACT
 Models of organizational structures developed through the study of commercial organizations are not necessarily applicable to educational organizations. Technical organizations such as factories act to regulate the flow of their processes and products and, thus, to buffer them from external forces. Institutional organizations such as schools or school systems seek to conform to the institutional environment, including the expectations of their constituents and, thus, buffer themselves from their own technical work processes. An institutional theory of educational organization offers explanations of the structural conformity and overall homogeneity of the system, and of its overall focus on organizational responsiveness to internal and external constituents. The absence of clearly understood and efficacious technical processes for obtaining desired educational outcomes would threaten the legitimacy and resources of the organization if a tightly coupled technical organizational structure were used. The institutional model needs further development, which should include reconceptualization of the distinction between technical and institutional environments, clarification of the kinds of "buffering" practiced, and specification of the nature of organizational success. (PGD)

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INSTITUTIONAL AND TECHNICAL SOURCES OF
ORGANIZATIONAL STRUCTURE EXPLAINING
THE STRUCTURE OF EDUCATIONAL
ORGANIZATIONS*

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Abstract

Most organizational structure is generally seen as arising from technical requirements for the coordination of work. In this paper, institutional sources of organizational structure are also considered: some organizations--in particular, educational ones--arise more out of environmental definitions than out of technical work coordination and control requirements. Institutional organizations, unlike technical ones, are tightly linked to the environment and loosely coupled to internal work activity and outputs. Some implications for educational organizations, along with some data supporting these implications, are discussed. In particular, evidence for the loosely coupled nature of school and district organizations is presented. Finally, a number of theoretical problems with the formulation are considered.

INSTITUTIONAL AND TECHNICAL SOURCES OF ORGANIZATIONAL STRUCTURE:
EXPLAINING THE STRUCTURE OF EDUCATIONAL ORGANIZATIONS

Introduction

In this paper, we sketch out two theoretical models of organizations--the currently fashionable model which emphasizes organizational structures built around the coordination of technical production processes, and a developing institutional model of organization which appears to be more appropriate for the examination of educational organizations and, perhaps, most types of service organizations. We next review some of the features of educational organizations which this alternative model describes and explains. In doing this, we present some empirical data from our research on elementary schools and school districts--data which conform closely to images of educational organizations found in other empirical studies. Finally, we indicate some of the major unresolved problems confronted in applying these models to the analysis of educational as well as other types of organizations.

Theoretical Framework: Institutional and Technical Sources of
Organizational Structure

Formal organizational structures arise through two main processes: First, complex technologies and social environments with complex exchanges such as markets foster the development of rationalized bureaucratic organizational structures to efficiently coordinate technical work (see Thompson, 1967;

Galbraith, 1973). Second, institutional structures emerge in society defining given types of roles and programs as rational and legitimate. These structures encourage the development of specific bureaucratic organizations which incorporate these elements and conform to these rules (Meyer and Rowan, 1977). The emergence of the factory predominantly reflects a process of the first type while the emergence of the school reflects primarily a process of the second type (Meyer and Rowan, 1978).

The history of schools has been misunderstood as reflecting the emergence of educational organizations which coordinate the technical work of education-- and schools have been frequently criticized for their failure to manage this work efficiently. From our point of view, this criticism is misplaced: Educational organizations arise to bring the process of education under a socially standardized set of institutional categories, not necessarily to rationalize the "production processes" involved in carrying on this work.

What difference does it make whether the processes creating modern educational organization are technical or institutional? In our view it makes a crucial difference: Organizations arising in connection with technical flows closely control and manage them. Their structures act to regulate the flows, to buffer them from uncertainty, and thus to insulate them in some measure from external forces. Such organizations, in other words, are under pressure to become relatively closed systems, sealing off their technical cores from environmental factors (Thompson, 1967). Techniques such as coding, stockpiling, leveling, anticipating, and rationing help to buffer the technical processes from external uncertainties. The intent is to de-couple technical work from environmental conditions so that it can be more tightly managed by the organization.

By contrast, institutionalized organizations closely integrate their own

structural arrangements with the frameworks established by the larger institutional structures. In doing so, they tend to buffer their structures from the actual technical work activities performed within the organizations. Using such techniques as certification, delegation, secrecy, and ritual, these organizations attempt to de-couple their technical work from the organizational structure so that it can be more closely aligned with the institutional framework.

Thus the technical organization faces in toward its technical core and turns its back toward the environment; the institutional organization turns its back on its technical core in order to concentrate on conformity to its institutional environment. More concretely, in order to survive, a factory must develop a well understood production process which can produce desired products at a competitive price and then must insure an adequate supply of raw materials, trained personnel, and market outlets; a reasonable tax situation; and so on. However, it is most crucial for a school, in order to survive, to conform to institutional rules--including community understandings--defining teacher categories and credentials, pupil selection and definition, proper topics of instruction, and appropriate facilities. It is less essential that a school make sure that teaching and learning activities are efficiently coordinated or even that they are in close conformity with institutional rules;

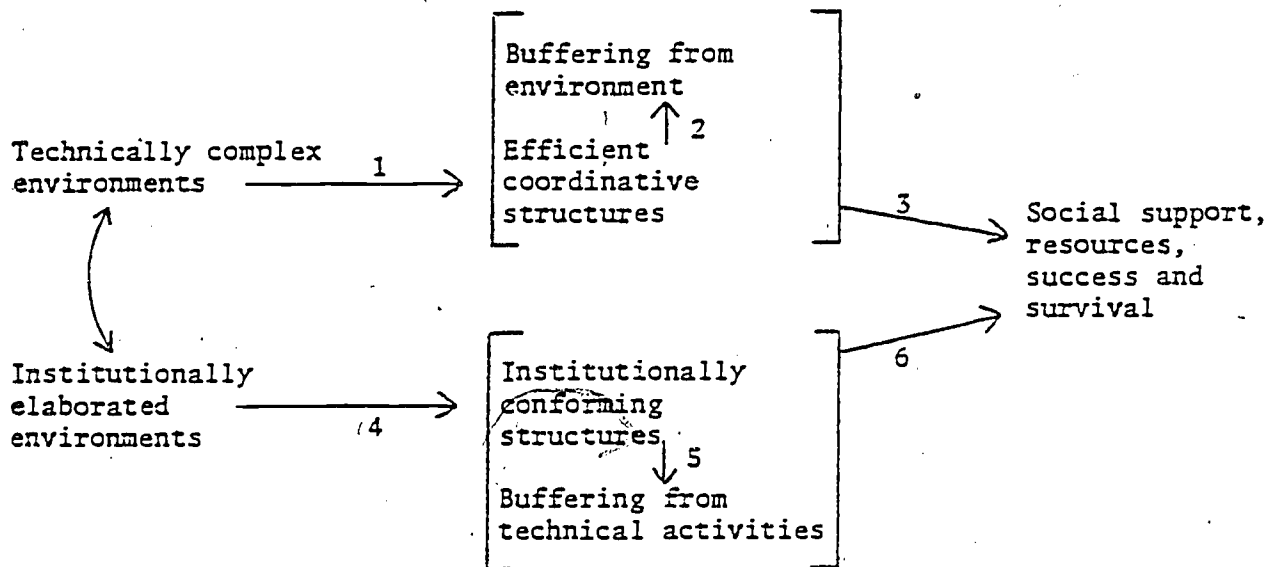
Six propositions, depicted graphically in Figure 1, summarize the theory:

1. Organizations evolving in environments with complex technologies create structures that coordinate and control technical work.
2. Organizations with complex technologies buffer their technical activities from the environment.
3. Organizations with efficient coordinative structures tend to succeed in environments with complex technologies.

4. Organizations involving in environments with elaborated institutional rules create structures which are in conformity with those rules.
5. Organizations in institutional environments buffer their organizational structures from their technical activities.
6. Organizations with structures that conform to institutional rules tend to succeed in environments with elaborated institutional structures.

Figure 1

Institutional and Technical Theories of Organization Structure



We will return in the final section of this paper to consider some of the difficulties posed by these propositions. First, we will examine their application to school organizations as a means of illustrating and amplifying the differences between the institutional and the technical models.

An Institutional Model of Educational Organization

With few exceptions, social researchers have examined schools from the vantage point offered by the technical theory of organization. This perspective emphasizes the ways in which organizations succeed by developing effective structures that coordinate and control work processes and regulate environmental demands. Much attention is devoted to the rational organization of the work processes within the organization: Developing an appropriate division of labor, specifying work procedures, and managing the resulting interdependence. Although management must be attuned to the environment as the ultimate source of resources, an important part of its responsibility is to prevent short term environmental fluctuations from disturbing internal work processes. From this perspective, schools appear to be peculiarly ineffective organizations. They do not control their work processes very well, particularly those most closely related to their central educational purpose: instruction. Instructional activities go on behind the closed doors of isolated classrooms. Collegially based professional controls are known to be weak, and there are only minimal efforts to coordinate institutional activities. Further, the ability of school organizations to buffer their activities from their environments is very limited: Schools are highly penetrated organizations.

Thus, the standard social science portrait of the schools which emerges is one of weak and ineffective organizations with little internal rationalization of work, little capacity to produce useful effects as measured by student

performance, and little ability to defend themselves from environmental intrusions. To a few, the schools seem to be essentially fraudulent organizations; to others, they are classic examples of organizational ineptitude.

This is an astonishing picture of an organizational arrangement which by many important criteria has been spectacularly successful. Huge amounts of money are allocated, and in a very stable way from year to year, to support the operation of schools. Personnel (and programs) are maintained stably. School organizations--in contrast with other types of organizations--fail infrequently. Further, surveys reveal that levels of participant and constituent satisfaction with schools are generally very high.

Thus, the problem may not be with the organization of schools, but with the types of models social scientists apply to examine them. We proceed now to elaborate the institutional model which appears to us to provide a better basis for understanding some of the most salient features of educational organizations (see also Meyer and Rowan, 1977, 1978).

The institutional model is built around two main ideas. First, school organizational structures reflect environmentally created institutional rules concerning education. Second, these organizational structures are decoupled from the technical work of education and many of its vagaries and problems. Organizational attention is directed toward maintaining conformity with the socially standardized categories of the educational system while little effort is expended in the control and coordination of instructional activities. We will examine each of these features more closely.

¹We continue to believe these assertions even though at the current time there have been a sizable number of school closings and staff retrenchments associated with the secular decline in the numbers of school-aged children. Indeed, we take it as an indication of the strength of these organizations that claims are made for their continuation even in the absence of a clientele to serve!

Educational Organization as a Reflection of Institutional Rules

We first consider the ways educational organizations are structurally formed, not to coordinate their own technical work, but to conform to rules institutionalized in their environments. We also consider some of the consequences this has for educational organizations.

1.. Structural homogeneity across schools and districts. Many observers have noted the surprising homogeneity of schools within the American school system. This feature is reflected in survey data we collected in 1975 from a sample of schools in the San Francisco Bay area.² Interview and questionnaire data were obtained from superintendents in 30 school districts, from principals in 103 elementary schools within these districts, and from 469 teachers in a subsample of 16 schools within these districts. The San Francisco Bay area is not presumed to be representative in its educational systems of other parts of the country. However, the selection process, which entailed the random selection of school districts from four size strata, did yield a diverse set of schools. Organizationally, schools ranged from those containing self-contained classrooms with relatively isolated, independent teachers to those containing open-space facilities and highly interdependent teaching teams. Instructionally, schools varied from those in which entire classes were using identical materials to those in which students followed individually tailored learning programs. The environmental setting of sample schools ranged from urban locations with a high proportion of lower-income minority students, to suburban locations serving predominantly upper-income white students, to rural areas.

²The survey data reported here were obtained in the second wave of a longitudinal survey. Details on the survey design and school sample are reported in Cohen et al., 1979.

As part of this survey, superintendents, principals, and teachers were asked to indicate "To what extent are there explicit school-wide policies in each of the following areas? We are interested in the existence of policies not in how they are implemented." Table 1 presents the simple marginal tabulations of the responses for each category of respondent. Several features of these results deserve comment. First, there is quite substantial agreement among the three role groups in their descriptions of the presence of formal rule structures. As we would expect, the perception of formal rules tended to relate to hierarchical position with superintendents perceiving more explicit policies than principals, and principals more than teachers. But the amount of consensus among role groups is more compelling than are the differences among them: the parties substantially agree on the kind of system they are in and on the extent of guidance provided by the formal rules. Second, the extent to which formal policies are perceived to exist varies substantially across substantive areas. We observe, for example, agreement among all respondent groups that there are explicit policies governing the reports of student grades while there are not explicit policies governing instructional methods to be used by teachers. Such variations, showing consensus among role groups about differences between areas, adds to our confidence that these data provide a fairly accurate picture of the formal norms within these schools.

The results in Table 1 suggest a system in which there is a great deal of overall agreement about the extent of formal policies and the areas to which they apply. What is the explanation for this high level of agreement? Two possibilities suggest themselves--two very different processes by which such consensus could arise. The first is organizational. Superintendents, principals and teachers in the same districts or schools may create and perceive a common normative environment. Because of environmental and

instructional differences between schools and districts, some variation occurs between schools or districts with consensus occurring within these systems. When responses of participants are aggregated across schools and districts, the average level of consensus is reasonably high because of the high level of consensus within the systems analyzed. The other process is institutional. According to this view, agreements on the nature of the schooling system and the norms governing it are worked out at quite general collective levels (through political processes, the development of common symbols, occupational agreements). Each school and district--and each teacher, principal, and district officer--acquires an understanding of the educational process and division of labor not from relating to others within the same organizational unit, but from participating in the same institutional environment, from sharing the same educational "culture."

It is possible to determine which of these views is the more accurate one. While an organizational explanation would predict higher levels of agreement within schools and districts than between these organizational units, an institutional explanation would predict high levels of agreement across all of the organizations without higher consensus within schools and districts. Table 2 reports the results of correlation and analysis of variance procedures which allow us to determine which explanation is more consistent with the patterns of agreement observed in our sample of schools. For each of the policy areas already identified in Table 1, we show in Table 2 correlations between superintendents' responses and the (aggregated) responses of the principals in that superintendent's district. Similarly, we show the correlations between the responses of principals and those of their (aggregated) teachers.³

³Note that this approach overestimates the extent of agreement within schools and districts by ignoring disagreements among principals in the same district and among teachers in the same school. This bias favors the organizational as against the institutional explanation.

Finally, we report analyses of variance, which show the proportion of variance in principals' responses which are accounted for by the district they are in, and the proportion of variance in teachers' responses accounted for by the school they are in.

The findings are dramatic. Superintendents and principals in the same district showed no special inclination to agree on explicitness of policies; and principals showed no special agreement with teachers in their own schools in describing school policies. And the analyses of variance revealed that very low proportions of the variance in principals' responses are accounted for by their district. While a somewhat higher proportion of the variance in teachers' responses was associated with the school in which they are located (in comparison to that which would occur by chance), the amount of variance explained by school location was still quite small. The particular data reported in Tables 1 and 2 are representative of many similar analyses we have carried out to examine the patterning of agreement among participants in school systems (see Meyer et al., 1978). Somewhat similar results have also been reported by Gross and Herriott (1965). Findings such as these call into question a conventional organizational interpretation, which would have participants in the organizational units--whether schools or districts--working out and reporting on a common normative structure somewhat distinctive to a particular unit. Instead, these data suggest that participants share a common conception of general features of the educational system in which they participate that is little affected by the specific organizational context in which they are located. The high level of agreement about this institutional system (as reflected in data such as those reported in Table 1) arises because these participants are describing a normative system that exists outside any particular educational organization. Each school and district is permeated by this

institutional system and its own internal order is a reflection of it. The participants within any given organizational unit, however, share only a limited set of rules or roles that are specific to that unit (as reflected in data such as those reported in Table 2). Most of their educational world, and most of their interpretations of that world, are institutionally constructed.

Of course, an alternative interpretation might be that schools and districts are rent with conflict--that the lack of consensus peculiar to each school and district shown in Table 2 indicates not institutional or system-wide consensus, but organizational conflict. Nothing in our data supports this view (see Table 3, Panel B). Principals and teachers report low levels of conflict among teachers (70% of the former and 69% of the latter say there is little or none). Most (86%) of the principals and 64% of the teachers report little or no conflict between teachers and principal. And 79% of the superintendents and 68% of the principals report little or no conflict between school and district.

2. Structural conformity to institutional rules. We have argued that the normative organization of schools has an institutional rather than an organizational basis. To specify more clearly how institutional rules influence organizational structure, it is necessary to elaborate on some obvious, but often overlooked, features of school organization. School organizations go to the greatest lengths, not to accomplish instructional ends, but to maintain their legitimate status as schools. They seek accreditation, which depends on structural conformity with a set of rules that are professionally specified and legally mandated, and react in panic when it is threatened. They hire teachers who are properly credentialed. Persons lacking such certification will not be employed regardless of their knowledge and instructional abilities. These teachers are assigned to carefully defined students who are classified

in grades that are given standardized meanings throughout the country (although there is enormous educational heterogeneity in any given grade). The teachers apply to the students a curriculum, which is in turn organized into a large number of fairly standardized categories (e.g., reading, mathematics, social studies) that are given some specification at the district and school levels, but are rather homogeneous in their meaning and content across the country (though there is little organizational inspection to see that this curriculum is actually taught or learned). Instruction occurs in buildings and classroom spaces whose characteristics and contents must conform to state laws.

This apparatus is managed by principals and superintendents, whose roles are also defined (and sometimes credentialled) by the wider environment. Similarly, schools and districts have, in their organizational structure, functionaries mandated or funded by state and federal programs (not internal coordinative exigencies). Thus, as the state creates and credentials reading specialists, and provides incentives for the discovery of handicapped readers, the schools elaborate these positions in their structures. (See Rowan, 1977). (There is little evidence of effective implementation, since many parents might object to the segregation of their children from age-mates, but the programs and their administrators exist.) Schools even create counter-programs--as when radicals object to the official stigmatization of pupils created by one set of programs, and demand the installation of another set to make sure that the hypothetically segregated handicapped students are effectively "mainstreamed."

At the district level, many parts of the organizational structure are similarly mandated, or made advantageous, by features of the institutional environment. A great variety of special state and federal programs and fundings create the need for special functionaries.

The larger point here is that individual school organizations conform to institutional rules defining what a school is. As illustrated, some of these rules are generalized cultural beliefs (e.g., definitions of roles such as teacher and elementary student and categories such as reading and mathematics), some are requirements enforced by occupational associations (e.g., tenure rules) and others are mandated by state or federal legislation (e.g., certification and accreditation requirements). Schools conform to these rules because it is adaptive for them to do so: their survival and resources depend upon their conformity with institutional requirements. Schools which are in any way suspect in terms of their legitimacy or accreditation status suffer drastically lowered survival prospects, irrespective of what evidence they have regarding their instructional effectiveness.

Consider a hypothetical study, for instance, which compared two small samples of schools selected in 1950. Sample One is simply a random sample of the routinely organized and accredited elementary schools in the country. Sample Two is made up of those structurally experimental elementary schools identified by sophisticated observers and researchers as being most effective in instruction or socialization. Now suppose we return in 1980. Which sample of schools will show the greatest survival value? Obviously not the effective set but the standard set. The standard set will go on, unquestioned and supported year after year. The experimental set will have experienced waves of conflict and questioning--and, eventually, many of their leaders will have left education or retreated to conduct research or create ideology as professors and critics of education.

3. Organizational responsiveness to environmental demands. An institutional model suggests that schools maintain high levels of interpenetration

with their environments, not as a reflection of their organizational weakness as would be the case for a technical organization, but as a source of their strength. While remaining stable and consistent in their general structural features and broad institutional categories, schools are highly responsive to the demands of their local, specific environments. They constantly create and renew the elements that link them with the surrounding community--attempting to retain high levels of legitimacy and support.

While it is common to decry the traditionalism of the American school system, it seems more appropriate to emphasize the extraordinary rate at which innovations of various kinds are incorporated into American schools (as well as the rapid rate with which they disappear). Our own survey of Bay Area schools and districts revealed enormous numbers of currently fashionable innovative programs in the schools--team teaching, individualized instruction, and so on (Cohen, et al., 1976). A set of organizations more constrained by the need to coordinate a core technology would be more constrained in its capacity to adopt and slough off innovations.

4. Participant and constituency satisfaction. Our argument suggests that schools succeed and fail according to their conformity to institutional rules, rather than by the effectiveness of their technical performance. A school is a successful school if everyone agrees that it is a school; it is not a successful school if no one believes that it is a school, regardless of its success in instruction or socialization. This leads to the supposition that schools will be attentive to their general reputations and, as a component of this, will seek to satisfy their constituent and participant groups.

Both groups are important. Schools need to keep their environmental consti-

tuencies happy, and the evidence suggests that they have been able to do so. Any number of parent and community surveys (e.g., Acland, 1975), show high levels of satisfaction with the schools--much higher than reported levels of satisfaction with most other public and private organizations. The schools also need to keep their own members happy. If there is no objective or "market" definition of success, the consensus of those most involved is obviously crucial. For this reason, school organizations are highly sensitive to dissidence and dissatisfaction, and attempt to moderate, coopt, and conceal it. By and large they succeed. Table 3 reports some data from our survey of the sample of Bay Area elementary schools, with information from teachers, principals, and superintendents. Panel (A) reports data on teachers', principals', and superintendents' satisfaction with their jobs, their colleagues, and their organizations. The data show--as do the results of many similar studies--rather high levels of satisfaction among the participants in the system.

The same findings hold in studies of students. By and large they describe themselves as quite satisfied with their schools and their work. Many studies--commonly ignored--show these simple results. In our own Bay Area Survey, a sample of 3rd graders in a number of classrooms reported high satisfaction with schools (Cohen, et al., 1976; Chapter 8). Similar data at the high school level have been collected by Dornbusch and others, at Stanford, and suggest that even students who are academic failures and frequently truant tend to define their schools as very satisfactory. The schools succeed in maintaining support even among those who are processed into failure by them. (Dornbusch, et al., 1974)

Summary: An institutional theory of educational organization offers explanations of the structural conformity and overall homogeneity of the system, and of its overall focus on organizational responsiveness to internal and external constituents. The system maintains its coherence and legitimacy by

conforming to an agreed-on set of institutional rules, by maintaining high levels of interpenetration with its environment, and by cultivating high levels of participant satisfaction.

Educational Work as Decoupled Within Schools

We turn now to the second main aspect of an institutional theory of educational organization--the decoupling of educational work from the formal structure.

1. The organizational deemphasis on instruction. The data in Table 1 show a striking substantive result. Two of the areas in which respondents report the existence of the lowest levels of organizational policy are the "type of curricular materials to be used" and the "instructional methods or techniques teachers use." In other words, schools develop few policies in the areas of greatest significance for their central goals and purposes. These areas are delegated beyond the responsibility of the organization. Other studies have reported the same distinctive feature of schools (e.g., Bidwell, 1965; Lortie, 1973).

Some interpret this absence of policy control over instruction as reflecting the absence or perversion of instructional goals among educators (e.g., "goal displacement"), while others see it as a form of technological weakness to be repaired by soon-to-arrive reforms (which were also awaited by Horace Mann). It makes more sense to see instructional goals as central for school personnel, but the actual direct control over instruction as introducing enough arbitrariness and uncertainty into organizational life to cause all sorts of difficulties in enacting the standardized categories institutionally required of schooling life. These uncertainties can be stabilized by rendering them invisible--they can be assigned to the trusted care of particular teachers who operate backstage, behind closed doors.

The delegation of instructional matters to individual teachers, finally,

is often justified by emphasizing the professional characteristics of these participants. The creation of professional actors is a well-known device for dealing with technical uncertainty; but in the case of teachers, neither they nor the public seem able to accept at face value this rhetoric. Thus, Dornbusch and Scott (1975) report that elementary school teachers, in sharp contrast to nurses, for example, acknowledge that their training is of little value in helping them to perform effectively, and collegial support and control systems seem to be virtually nonexistent.

2. The inactivity of the instruction-related control system. The nonuse of the systems of administrative evaluation and control over instruction and its outcomes have been extensively described elsewhere (e.g., Dornbusch and Scott, 1975). Teachers are infrequently observed or evaluated; the same is true for principals (see Table 3, Panel C). Although pupil achievement data are routinely collected for individual students and are used to monitor their progress and determine their opportunities, the same data are rarely aggregated so as to provide a basis for assessing the performance of individual teachers, schools or districts.⁴

In most interpretations, this situation would be regarded as evidence for the structural weakness of school organizations. According to our argument, however, it arises out of the institutional strength of the schools--their ability to lock themselves into place by adherence to institutional definitions which legitimate their activities so long as they are conducted according to

⁴Some data of this kind are beginning to be made available for school and district evaluations in California, but only under the pressure of the state legislature, not the administrative system.

agreed upon rules. Efforts to actually inspect educational outputs, to coordinate the specifics of what is taught to individual students by particular teachers would invariably increase conflicts with parents and students, cause dissatisfaction among teachers, and vastly increase the burdens of administrators. Whether or not these efforts would also lead to improved educational outputs among students is uncertain. Conventional wisdom insists that this would be the result; we are less certain.

3. Loose coupling among structural units. In addition to the de-coupling just described in which formal control systems were infrequently used to inspect or coordinate instructional activities, units at the same level (e.g., classrooms) are permitted and even encouraged to pursue unrelated or contradictory programs. We have already mentioned the example of programs which isolate students for special educational purposes coexisting with programs that mainstream the same students. Loose coupling which permits the simultaneous operation of inconsistent programs permits schools to be responsive to contradictory environmental pressures, as Weick (1976) has noted.

4. Disimplementation. School organizations viewed over time incorporate and maintain a large number of new programs and services. As innovations arise and become legitimated in the environment, many are organizationally incorporated by schools and districts. An analysis by Rowan (1977) of a sample of public school districts in California reveals an interesting pattern in the survival of these innovations at the district level. Innovations such as school health and cafeteria services which were relatively remote from the core instructional activities of schools showed the most stable pattern of growth and development over time; innovations such as guidance and psychological services which were moderately remote from instructional activities showed an intermediate pattern of stability; while programs such as curriculum and instructional specialists--

programs most directly relevant to the core technology of schools--were the least stable over time. Those innovations which were intended to organize and coordinate the instructional activities within the districts were themselves most likely to be disimplemented, either by being removed from the formal structure or by continuing to exist but having little impact on actual instructional activities.

Shifting from the district level, there does appear to be a high level of innovation particularly within individual classrooms. As already noted, new materials and methods are quite routinely introduced into classrooms, as individual teachers discover or invent instructional changes. However, little of this activity is systematically organized at the school or district level; rather, it proceeds more like a random diffusion process as new devices sweep through the educational world and die out only to be replaced by others. In our own Bay Area school research, we found a great deal of variation from classroom to classroom in curricular materials and instructional methods but these arrangements were largely independent of the organizational features of the schools and districts.

We concluded from our analyses:

In adopting new patterns of work or new instructional materials and techniques, the higher organizational levels do not control or coordinate the responses of the lower ones. Innovations do not appear to enter the school through formal organizational channels. On this basis, we are led to conclude that school organization is doubly segmented. Schools are segmentalized within the districts; classrooms are segmented within the schools. Each segment or level reacts to a highly innovative educational climate, selecting from this environment new and more complex organizational and instructional forms without a centralized center of coordination and control to make this selection a systematic one. (Deal, Meyer and Scott, 1975).

In short, classrooms are sufficiently decoupled from school and district structure that a good deal of innovation is possible, but by the same token, such innovations are unlikely to persist in the absence of organizational supports.

Summary. Schools exist in environments that are highly elaborated in their institutional structures but relatively poorly developed in their technical systems. The absence of clearly understood and efficacious technical processes for obtaining desired outcomes has been frequently noted. This combination of circumstances can explain many of the current features of educational organizations--their sensitivity to environmental pressures, their inclination to avoid evaluation of instructional programs or outputs, and their failure to implement adopted programs. For in many respects conformity to wider institutional rules is incompatible with detailed control over technical work activity. Such control reveals inconsistencies and conflicts between institutional rules, raises questions about the effectiveness of the programs, exposes vague and vacuous goals and procedures, and makes explicit the difficulties and problems of implementation. Under such circumstances tight coupling of the organizational structure with the technical activities can only lower the legitimacy and threaten the resources of the organization.

Some Unresolved Theoretical Problems

As presently stated, the institutional model of organizations provides a general set of images and ideas which can be applied to educational--as well as many other--organizations. It offers an account of some of the distinctive aspects of these organizations--an account that varies substantially from the conventional one--but it does so in terms that are often vague and ambiguous. In its present form, it offers more an interpretation of (selected aspects of)

observed phenomena than precise directions for further empirical work. In order to facilitate the pursuit of these ideas, we have identified several theoretical issues that seem especially important to work through if we are to develop more precise predictions. Three general issues are discussed here.

1. Reconceptualizing the distinction between technical and institutional environments.

We have broadly distinguished two types of organizational environments, but our distinction immediately runs into difficulties. Most obviously technical and institutional environments are not necessarily opposites: Technologies become institutionalized in their own right, and organizations come to be required to conform to them in actual work activity for institutional rather than technical reasons. Further, rationalized institutional arrangements in society often come to spell out and enforce technologies of action (whether objectively or socially defined as efficacious) in great detail. Hence, institutional environments may not always lead to a decoupling of organizational structure from technical activities. For example, many specific medical technologies become institutionalized, and enter into the environment of the hospital both as available technologies and as institutions to which conformity is demanded. Pressures to utilize them are both institutionally enforced (failure to give proper appearances may lead to delegitimation e.g. loss of accreditation) and technically required to produce satisfactory outcomes. Our theory is very ambiguous here: Will the resultant organizational arrangements be tightly or loosely coupled? Are the two processes really at odds much of the time in organizational life? Are conflicts produced, or is the system simply very highly integrated?

Some of these issues arise in educational organizations too, but often at the margins of central instructional activity. Rules concerning student attendance,

for instance, can affect the behavior of classroom teachers who are expected to enforce them as well as the administrators who keep the official records of the school. But these issues arise with greater force, perhaps, in other kinds of organizations. And we can understand both the issues and their implications by studying them more comparatively, that is, in more than one type of organization.

We have identified five theoretical questions within this general area requiring further work.

First, what is the degree and focus of environmental specification of the organization's work: in particular, what is the degree of environmental specification of organizational structure: work roles and organizational arrangements? What is the degree of environmental specification of organizational technical work processes? And what is the degree of environmental specification of organization outputs (see Scott, 1977)? These questions can be answered rather clearly with respect to educational organizations. Environmental specification attaches to organizational structures (qualifications of teachers, categorization of pupils, size of classes, etc.), but very little to technical work processes, and even less to outputs (aside from case-by-case parental inspections and nationwide disputations about the relation between "Johnny" and "reading"). But other kinds of organizations vary greatly along this dimension.

But second, what is the organizational level at which the environment specifies organizational work? At which levels are proper structures, technical work processes, and outputs, defined? For schools, at least three organizational levels may be usefully identified: Classroom, individual school, and district organization (see Meyer, et al., 1978). The identification of organizational levels makes it clear that our answers to the first question above were simplistic. In education, environments specify some aspects of structural arrangements down to the classroom level, but much less within that level.

Work process specifications are very weak, but vague definitions are made at several levels. Outputs, however, which are almost unassessed at the classroom level, are checked carefully at the level of the school and district though in an odd way: Environments attend carefully to the numbers of students and graduates produced, but leave the question of who is or who is not a graduate up to the most vague structural definitions and organizational choices.

Third, the first two issues are interwoven with another question: What is the nature of the technology environmentally imposed on the organization. That is, what are the links between structures, work processes, and outputs? These links may be treated as objectified technical truths, as when it is entirely clear to everyone that certain professional skills or organizational arrangements uniformly produce certain specified work processes, which in turn uniformly produce certain specified outputs. Or these links may be made social tautologies, as when certain arrangements of teachers and pupils (structures) are by definition understood to produce appropriate work processes (teaching) and certain outputs (credit, graduation, etc.).

Fourth, organizations are associated with many diverse environments which force on them institutional rules and technical specifications. Our theory is formulated as if environments were unitary. But educational organizations, for instance, produce different outputs under different controls, for varying categories of students, parents, community sectors and state business. These varying environmental constituencies impose different institutional constraints and technologies on educational organizations simultaneously. Indeed, one can argue that apart from the institutional considerations already discussed, American educational organizations are loosely coupled precisely because of the extraordinary pluralism of their environments (Meyer and Rowan, 1977). We need to consider both the variability built into organizational environments, and

the way in which this variability is systematically reflected in organizational structures and processes. Many parents and students, for instance, inspect schools on processes and outcomes. State agencies inspect mainly structural arrangements. And one of the reasons schools decouple higher from lower organizational levels is to simultaneously satisfy the demands of both constituencies.

Fifth, two types of environments have been identified as influencing organizational structures, processes and outcomes. Inasmuch as the environments identified are quite different in character, we should also expect the mechanisms by which they affect organizational arrangements to vary. Market mechanisms are presumed to be of primary importance in the case of the technical environments. This suggests that organizational conformity (whether in structure, processes or outputs) is not compelled by some type of formal rules or a threat of delegitimation but by a concern for profitability and survival in a competitive market. In addition, as Pfeffer, Miles and Snow (1974) have suggested, there is no reason to expect a single structural form or set of organizational processes to be associated with effective adaptation; rather, a range of organizational arrangements may be equally adaptive for a given technical environment. By contrast, institutional environments are expected to produce their organizational effects by the use of such mechanisms as rules, regulations, and inspections. In these environments, organizational survival is dependent on conformity to institutional norms and procedures. In response to these differing mechanisms, we would expect to observe greater variability among organizational structures, processes and outputs within technical environments than within institutional environments.

We need to specify such arguments and variables as these with much greater clarity, and to consider their separate impact on organizational arrangements and on the relation between these arrangements and ongoing work activity. And in order to make such a specification more general, we need to consider variations,

not only among educational organizations, but between these structures and organizations of other types operating in systematically different contexts.

11. The meaning of buffering.

Our theory proposes that organizations maintain stability by "buffering" themselves from parts of their complex social and technical worlds which bring instability to their existence. Following Thompson (1967), we suppose that organizations in more technical environments buffer their core technical activities from environmental instabilities. And we argue that organizations in highly institutional environments organize around their core institutional elements, with managers buffering their technical core from close regulation or inspection of either technical activities or work outputs.

We are convinced that these ideas are generally useful, but we need to explore theoretically a central problem in the formulation. The term "buffering" as used in our arguments has meanings which vary greatly along a continuum running from "management" to "concealment." Elements may be buffered from each other by arrangements for their explicit coordination, as when inventories are maintained, or planning undertaken, or stabilizing agreements formulated. These kinds of management devices tend to increase coordination, control, and the organizational division of labor. But at the other extreme, buffering can take the form of decoupling, or immunization, or insulation, as interdependence and coordination among units is decreased, along (in all probability) with the organizational division of labor. And, of course, there are all sorts of intermediate positions on this continuum. In the real world, it may not be entirely clear whether a given managerial arrangement is buffering by concealment or buffering by effective coordination. The manager often supposes the latter is happening, while others sometimes suppose the former is happening. The two are not opposites, and some

of both is usually going on. Expanded accounting systems, for instance, both coordinate and conceal or insulate activities from each other.

It seems a great mistake to lump such disparate phenomena, with distinct organizational implications, together under the heading "buffering." In our theoretical formulation, we tend to evade this problem by implying that buffering the technical core in institutional environments always involves insulation and concealment, while buffering in technical environments always involves management and coordination. But this kind of cynical Populist assumption (validating the market and delegitimizing institutional arrangements) is clearly naive: It tends to ignore the respects in which technical organizations satisfy their environments with all sorts of commodities of abstract value which turn out to be concretely useless, for instance. And it misses the fact that much of the institutional responsiveness of schools leads, not only to concealment, but to the relatively effective management of organizational work processes. In response to the institutional pressures on them, for instance, schools manage very complex systems, managing the passage of large numbers of pupils from their homes to school, through a complex set of differentiated organizational routines and home again, and manage them with considerable precision.

We need to rethink the meaning of the term "buffering," to distinguish more specific variables under the general heading, and to consider the origins and consequences of each. Schools, for instance, which are our prototypical institutionalized organizations, certainly operate by insulation and concealment (loose coupling) in important respects. In other respects, however, they are extremely effectively coordinated not only institutionally, but organizationally as well. We need to be able to define these different kinds of buffering more clearly, understand the factors that produce various types of buffering, and consider the disparate consequences of these various types.

III: Specifying the nature of organizational success.

We have argued that organizations in technical environments succeed through efficient technical coordination, while more institutionalized organizations succeed through conformity with larger rules. We have defined success in very general terms to mean resource acquisition, long run survival, and so on. These general terms can usefully be elaborated and specified.

"Success" can be broken down into a series of components. It seems very likely that the different types of organizations we distinguish end up with systematically different mixes of these components of success. Successful technically structured organizations, often existing in exchange markets, acquire mixes of resources emphasizing financial value more, and social prestige and guarantees less. Institutionally structured organizations, on the other hand, are likely to acquire high levels of social support, legitimacy and other fixed capital, and guaranteed viability, but may receive proportionately fewer financial resources for discretionary use. Obviously, as noted above under Problem 1, we need to distinguish more kinds of organizations and organizational environments. Equally obviously, we need to greatly elaborate our definitions of organizational success, and identify the equilibrium states of resource mixes involved in success for the various types of organizations.

This theoretical problem is relevant, not only to understanding educational organization, but also to the general analysis of post-industrial society. This kind of evolving society can be defined by the great expansion of institutionalized rules and organizational structures which define and produce various services rather than market commodities. If we understand the distinctive resource mixes controlled by such institutionalized organizations, we can better understand the shifting value and stratification system of post-industrial society. This is an urgent problem in

the study of national social development generally: It has widely been noticed that currently developing societies acquire the institutionalized services of post-industrial society very rapidly -- not after industrialization as in the history of the West. One may take very different views of this process: Conservatives call it socialism, liberals call it modernity, and radicals tend to refer to it as the "bloated tertiary sector." In any event, it is a rapidly-occurring, world-wide phenomenon. And much of the distinctive structure and value involved in these social changes is built into what we have called institutionalized organizations.

Table 1
 SUPERINTENDENT, PRINCIPAL, AND TEACHER REPORTS OF
 THE PRESENCE OF SCHOOL-WIDE POLICIES IN A NUMBER OF AREAS

QUESTION: To what extent are there explicit school-wide policies in each of the following areas? We are interested in the existence of policies not in how they are implemented.

	<u>Supt.</u> %	<u>Principal</u> %	<u>Teacher</u> %
Type of curricular materials to be used			
Little or no policy	16	24	11
General guidelines only	47	65	75
Detailed explicit policy	33	11	13
Instructional methods or techniques teachers use			
Little or no policy	47	58	39
General guidelines only	49	41	52
Detailed explicit policy	—	1	8
Rules for student conduct on school grounds			
Little or no policy	11	2	3
General guidelines only	33	48	52
Detailed explicit policy	52	51	42
Written reports of student progress or grades			
Little or no policy	3	6	5
General guidelines only	14	22	44
Detailed explicit policy	79	72	50
Identifying students with learning disabilities			
Little or no policy	--	2	(not asked)
General guidelines only	17	26	--
Detailed explicit policy	79	72	--
Dealing with chronic student absence			
Little or no policy	6	14	19
General guidelines only	38	46	52
Detailed explicit policy	52	40	28
Ensuring that needy students have adequate food and clothing			
Little or no policy	18	31	24
General guidelines only	43	37	46
Detailed explicit policy	35	31	29
Criteria to be used in evaluating student learning			
Little or no policy	25	12	13
General guidelines only	33	48	61
Detailed explicit policy	37	41	25
Student conduct in classroom			
Little or no policy	25	18	17
General guidelines only	48	57	70
Detailed explicit policy	22	20	12
N =	30	103	469

Table 2:

- A. CORRELATIONS BETWEEN SUPERINTENDENTS AND PRINCIPALS, AND BETWEEN TEACHERS AND PRINCIPALS, IN REPORTING THE PRESENCE OF SCHOOL-WIDE POLICIES
- B. PROPORTIONS OF VARIANCE ACCOUNTED FOR IN PRINCIPAL REPORTS OF THE PRESENCE OF POLICY BY WHICH DISTRICT THEY ARE IN. AND PROPORTIONS OF VARIANCE ACCOUNTED FOR IN TEACHER REPORTS OF POLICY BY WHICH SCHOOL THEY ARE IN

QUESTION: To what extent are there explicit school-wide policies in each of the following areas?

	A. Correlations:		B. Analyses of Variance:	
	Principal-Supt. (n = 97)	Principal-Teachers (n = 28)	Principal Reports: Eta-Squared*	Teacher Reports: Eta-Squared**
Curricular materials	.11	.29	.35	.27
Instructional methods	.12	-.06	.24	.28
Student conduct on school grounds	-.04	-.21	.27	.32
Reports of student progress	.23	.23	.38	.21
Identifying learning disabilities	-.16	(not available)	.22	(not available)
Dealing with chronic absence	.09	.24	.42	.30
Ensuring needy students have food	.01	-.24	.29	.27
Criteria for evaluating learning	-.05	.02	.23	.34
Student conduct in classroom	.09	.00	.28	.23

* Percent of variance between districts. N = 106, 26
(chance value about .28)

** Percent of variance between schools. N = 469, 28
(chance value about .14)

Table 3

SUPERINTENDENT, PRINCIPAL, AND TEACHER ANSWERS TO QUESTIONS ON JOB SATISFACTION, CONFLICT, AND INTERACTION AND EVALUATION: BAY AREA STUDY

	Superintendent n = 30	Principal n = 103	Teacher n = 46
A. Reported Satisfaction:			
% very or extremely satisfied with job	80	86	88
% very or extremely satisfied with school	--	76	79
% very or extremely satisfied with teachers	85	81	--
% very or extremely satisfied with principal(s)	94	--	66
% reporting better than average teacher satisfaction	61	76	--
% reporting above average community satisfaction	62	70	--
% reporting active community support	89	98	--
B. Reported Conflict:			
% reporting little or no conflict among teachers	--	70	69
% reporting little or no teacher-principal conflict	--	86	64
% reporting little or no school-district conflict	79	68	--
C. Reported Evaluation and Work Interaction:			
% reporting frequent reading teacher evaluation	--	49	20
% reporting district evaluation of schools more than once a year	11	14	--
% reporting principal is well informed about their instruction	--	--	36
% reporting faculty meetings at least weekly	--	15	--
% reporting frequent principal advice on teaching	--	29	2

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