This paper discusses those generic features of school districts as complex organizations which inhibit district coordination of testing, evaluation and instruction. It is based on a selective literature review and four theoretical papers covering (1) school district decision making, (2) the institutional structure of school districts, (3) role conflict among research and development directors, and (4) the schism dividing achievement monitoring from analytic evaluation. Analysis of these field study data revealed the salient characteristics of school districts as complex organizations and the implications these attributes have for the focus of this research. The sections are organized as follows: introduction; generic factors which inhibit district linkage of testing, evaluation, and instruction; situation-specific conditions which can override those generic factors; variations observed among the school districts; and conclusions that may be helpful to district managers wanting to develop management strategies to coordinate their own testing, evaluation and instruction operations. (Author/PN)
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EVALUATION DESIGN PROJECT

MANAGING TESTING, EVALUATION AND INSTRUCTION IN SCHOOL DISTRICTS:
ORGANIZATIONAL PERSPECTIVES

(NIE book chapter)

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Managing Testing, Evaluation and Instruction in School Districts:
Organizational Perspectives

Richard C. Williams and Adrianne Bank

For the last two years, we have examined the problem of how school districts can effectively link testing and evaluation activities to their own on-going instructional programs.

We became curious about this question because most school districts seemed to be ignoring the potential testing and evaluation data have for instructional improvement. Many districts have considerable capacity to collect and analyze test data; the evaluation community has emphasized a multi-disciplined approach to utilization-focused evaluation. Few districts seemed to have incorporated these activities and developments into their regular, ongoing decision-making procedures.

Why don't district administrators do what seems so obvious to many outsiders -- that is, analyze test scores and other evaluative data in a systematic way to find out what students have already learned and then make appropriate inferences about ways to improve the districts' instructional programs so as to enhance students' learning?

We suggest that even if technical difficulties were overcome, the generic characteristics of school districts make this phenomenon relatively rare. But we have discovered conditions and activities in some districts that have enabled them to forge this linkage among testing, evaluation and instruction. We believe that other districts can learn from their experience and forge similar linkages.

In this chapter, after a short introduction we discuss those generic features of school district as complex organizations which inhibit district coordination of testing, evaluation and instruction. Then we analyze specific conditions in our sample districts and offer some conclusions which might be of use to interested school districts. The sections are organized as follows:

- Introduction
- Generic factors which inhibit district linkage of testing, evaluation and instruction;
- Situation-specific conditions which can override those generic factors;
- Variations we observed among the six districts;
- Conclusions that may be helpful to district managers wanting to develop management strategies to coordinate their own testing, evaluation and instruction operations.
INTRODUCTION

In 1975, the Center for the Study of Evaluation (CSE) at UCLA, submitted to the National Institute of Education (NIE) a long-term plan for an integrated set of studies focused on school districts' use of evaluation. At that time when many national policy-makers mandated evaluations of large scale federally funded programs for their, the policy makers', decision-making purposes, we urged that the local district decision-making uses of evaluation also deserved attention. The needs of legislators and administrators for information about the effectiveness of those educational innovations supported by external funding was matched, we felt, by the needs of district boards and administrators for information about teaching and learning -- the presumably routine business of schools districts supported by local dollars.

Prior to the 1960's, teachers generally administered and marked quizzes or tests they had developed themselves or they used tests provided by text publishers. Teachers used these tests primarily to motivate students to study, to give grades, and to check up on who was learning and who wasn't. Guidance and counseling personnel also administered tests as part of their diagnostic procedures for placing children in special programs or referring them for additional services.

However, by the mid 1960's, with the advent of evaluation requirements that accompanied externally funded programs, school district central offices became involved in extensive testing and evaluation activities. Thus, teachers began to also administer standardized tests in addition to their own classroom tests.
By 1975, many district offices began to test all children, not for grading or class placement purposes, but to evaluate district-administered but externally funded programs; not for reporting to parents about their own children, but for sending reports to distant offices so that legislators and administrators could decide whether to continue, modify or stop particular programs.

Each school district organized its response to those external demands for information in its own way. Some districts hired consultants who wrote the required evaluation reports by culling data from routinely administered district-wide standardized test data. Other districts attached in-house evaluators to each of their categorically funded programs -- so that bilingual evaluator, special education evaluator, compensatory education evaluator became common job descriptions. Still other districts, especially the larger ones, consolidated testing and evaluation into organized units called by various combinations of words such as "testing," "evaluation," "assessment," "policy," "planning," and "research."

Concomitant with, and in support of district testing and evaluation activities, university-based evaluation activities also expanded. Within ten or fifteen years, evaluation research became an identifiable profession replete with its own division within the American Educational Research Association, university graduate training programs, and journals. Professional recognition was bestowed when the Library of Congress listed evaluation research as an official catalogue description in the late 1970's. The field expanded conceptually as well as numerically. Academic evaluators moved from a narrowly focused concern with forcing an experimental
research paradigm onto real life settings towards realizing that evaluation methodology had to match the special demands of the situation and the evaluation audience.

It was within this context that in 1975 the UCLA Center for the Study of Evaluation (CSE) proposed to the National Institute of Education (NIE) a multi-year research study of how school districts were conducting their testing and evaluation activities. Our research was divided into two parts:

- to describe, by means of a national survey, how school districts organized, staffed, and funded their evaluation units;
- to examine, by case studies, school districts who were attempting to use evaluation and testing to serve local instructional decision-making purposes.

The results of the national survey have been reported elsewhere.1

An important focus for our case studies was to explore generic school district organizational characteristics and try to determine which characteristics affected the ways districts used tests and evaluations for instructional decision making. We wanted to understand if and how school district generic characteristics affected the ways school districts managed their testing, evaluation and instruction activities. District central office administrators appear to have considerable discretion when they design their districts' testing and evaluation activities, i.e., to select

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texts, within state regulations; to standardize curricular scope and sequence within and across grade level, and to direct teachers to use various classroom management and instructional practices. We wanted to understand those organizational influences that seem to inhibit the districts' coordinating their testing and evaluation with instructional decision making.

Our project had two parallel thrusts. One was to understand school districts as complex organizations and the other was to conduct field studies. We conducted our own selective review-of-the-literature on school district organizational characteristics. In a parallel activity, we commissioned four outstanding organizational theorists from the University of California to help us. Each theorist conducted a separate analysis of the data from CSE's national survey of school district research and development units and prepared a paper. Each of the four papers reflected the author's particular theoretical interest and orientation. The topics covered were: school district decision making, the institutional structure of school districts, role conflict among R&D directors and the schism dividing achievement monitoring from analytic evaluation.

Armed with our own organizational literature review and the four analytical papers, we conducted field studies over a two year period in several districts that were reputed to have a management strategy for linking testing and evaluation with their instructional decision making. Using a

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2. These papers have been published as part of the CSE Monograph Series in Evaluation with the title Evaluation in School Districts: Organizational Perspectives, edited by Adrianne Bank and Richard C. Williams, CSE, 1981.
reputational approach, we found about 40 districts that at least someone identified as making an effort to link their testing and evaluation with instructional decision making. From among these nominees we identified through telephone screening and visits, several districts whose actual activities measured up to their reputation. Our final set of districts were diverse in: size, location and ethnicity. All of our final districts which had operated their management system for linking testing and evaluation with instruction for a number of years.

Examples of what these districts were doing to link testing and evaluation with instruction are as follows:

One small district had first constructed a K-6 scope and sequence of skills for math, language arts and reading, then had teacher teams develop criterion referenced tests (CRT's) for selected milestone objectives. Students now take these CRT's quarterly. The results are used by teachers within classrooms to regroup students for instruction and by the district for long-range instructional program development and revision.

In another larger district the evaluation unit provided individual schools with composite data from norm-referenced tests and parent/teacher surveys so that school site planning teams could develop budgets and action plans for the coming year.

The central office staff in a third district concentrated on developing mini-courses and workshops for a staff development program. The content of the courses came from the district's annual analyses of students' performance on state assessment tests.
A fourth district office used student test score data comparing students in two different instructional modalities to support their efforts to transform all elementary schools into "fundamental" schools. Teacher compliance with the district mandate and student achievement was monitored by the district using classroom observations and student test scores on norm-referenced tests.

In yet another district, the central administration had developed, with extensive teacher and principal involvement: a district instructional continuum, desired teaching methodologies, supporting criterion-referenced tests and a supervisory system for carefully monitoring the program's coordination and implementation.

In each district we spent several person-weeks observing, reading documents, interviewing board members, administrators, principals and teachers and visiting schools and district units. We sought answers to such questions as: why is this district developing management strategies to link testing and evaluation with instruction when so many others are not; what specific conditions, processes and techniques have marked their efforts; what have been the results of their efforts?

**GENERIC FACTORS INHIBITING DISTRICT LINKAGE OF TESTING, EVALUATION AND INSTRUCTION**

Based on our own literature reviews and the faculty papers that were produced from this study, we developed the following perspective on the
salient characteristics of school districts as complex organizations and the implications these attributes have for the focus of our research.

Organizations can be described as groups of two or more people who have come together to accomplish goals that could not be accomplished individually. For many years, theoreticians and practitioners have been trying to classify the characteristics of organizations in order to better understand their functioning and thereby improve their effectiveness and efficiency. The search for a common set of management principles or an all-encompassing theory of organizations has proven to be difficult and complex. Somehow the deeper one probes into the dynamics of organizations, the more one realizes how much there is to learn. At the present time the field of organizational theory is in a healthy state of disarray. Rather than continuing to search for the all-encompassing theory, many researchers have tried to distill and describe the essential features of different kinds of organizations. By so doing they have hoped to gain a better understanding of specific types of organizations and of organizations that share common properties.

For example, San Quentin Prison, IBM and the Roman Catholic Church are complex organizations. But even a cursory examination will reveal vast differences among them regarding characteristics such as: reasons for membership in the organization, selectivity of clients, authority structures, agreed-upon measures of success. We are likely to make more progress in understanding the management strategies used in complex organizations if we separate organizations into appropriate classifications, and compare examples which exhibit common critical characteristics and are thus in the same category.
For purposes of this analysis we have chosen four important generic characteristics of typical public school districts that we feel make it difficult or provide disincentives for districts to link their instructional decision making to district testing and evaluation activities:

- institutionalization and domestication
- goal diffuseness
- permeable boundaries
- loose coupling

In the following paragraphs we will describe each of these characteristics and discuss their implications for school district linking activities.

Districts as Domestic Institutional Educational Organizations

When we use the phrase "domestic and institutional" (Carlson, 1964; 1965), we mean to imply that school districts are organizations upon which have been placed many external societal controls. These external expectations, regulations and constraints leave district managers with little autonomy in certain matters. For example, school districts cannot, for the most part, choose their clients, i.e., students. These clients or students, in turn, are for the most part obligated to attend schools run by the district. Some children, of course, can choose to attend private schools, but the percentage who have done so in the past has been quite small in most communities and remains only a small percentage of the total school age population. The school district's level of financial support is externally determined and only minimally guaranteed. Typically the school site's support level does not vary with the schools' performance (Carlson, 1964; Gallaher, 1965), but in accordance with financial and political
considerations beyond the district's power to influence. Additionally, teachers' unions and contracts have limited the power of administrators to hire, fire, and transfer personnel.

One consequence of this domestication is that the school district need not "prove their worth" in the marketplace on any regular or critical basis. That is, unlike many private sector organizations, their continued flow of both clients and funds is relatively independent of the quality of service. Consequently, the quality of the district's technical services -- i.e., instruction -- may receive less sustained and system-wide attention from managers than such services would in some other organizations, either public or private, where the critical relationship between the success of the technical core and the organization's survival is more clearly evident. What does receive sustained attention from school district managers are those areas in which the school is held publicly accountable -- e.g., honoring union contracts, keeping schools open a minimum number of days, complying with health, safety and financial regulations, etc.

Viewed from this perspective, there does not appear to be a strong "bottom line" incentive for schools districts to focus on improving the instructional technical core particularly through using test scores and evaluative data to monitor student outcomes and program inputs (Meyer, 1977; Niedermeyer, 1979). Indeed, some (Meyer and Rowan, 1978) argue that it may be detrimental to their public survival for school districts to link test scores and evaluative data to instructional improvement efforts in any highly visible way. They assert that schools, like libraries and national parks, are institutionally valued. Therefore, their constituents, the
public, regard them as having intrinsic worth rather than worth derived from market-place success or empirical demonstrations of their technical competence. The public seems to have believed -- at least until very recently -- that schools have high social worth. This being the case, school districts have not been called upon to demonstrate their technical worth in terms of student achievement. These authors argue that if the public were given the means to clearly link student test scores with the instructional program, this might prompt many to recognize that schools do have, in fact, a weak technical core and have limited capacity to provide instruction appropriate to meet student needs. This could cause a serious breach in confidence, precipitating a decline in public support, both in terms of dollars and pupils. If such an argument is valid, and we believe it is, it is likely that many school district central offices have little incentive to develop a highly visible system linking testing and student test scores or evaluative data about educational activities to a district-wide instructional improvement effort.

Goal Diffuseness. Likewise, school districts have difficulty in defining instructional goals such that parents and citizens can clearly identify high priority learning objectives and the extent to which the students are achieving them. Some observers have noted that although there may be general agreement on the basic skills which our society expects schools to provide to students (Goodlad, 1979), there are national and local disagreements as to which basic skills need the greatest immediate emphasis, or, beyond the basic skills, which subjects have the highest priority (Elboim-Dror, 1970). For example, various publics have different views
about the importance of the schools' role in developing critical thinking skills, in providing students with a critical sense of historical events, and in teaching students to appreciate art, literature, culture? The pluralism of our society tends to introduce conflicts about instructional goals and priorities which some school districts may resolve by leaving goals and objectives ambiguous and general.

Interestingly, there is less ambiguity about the intended outcomes of the many non-instructional activities and responsibilities which have been assigned by public or government agencies to schools over the years -- for nutrition, medical services, and counseling, for example. In addition, interest groups with some success have pressured the schools to allocate additional instructional resources, often specified in great detail, to selected categories of students, e.g., economically deprived, handicapped, bilingual, gifted. Thus, school district staffs seem to have neither the independence, authority, nor the means to order their own internal priorities and then set about a carefully planned, long term course of action to achieve clearly specified instructional goals (Elboin Dror, 1970). This goal diffuseness around the district's and the schools' core instructional activities supports our earlier observation that the survival of schools and districts as organizations seems to depend more on external accommodation than on goal attainment.

Given the importance of external accommodation, schools tend to depend on ceremonial events as evidence of school effectiveness (Meyer and Rowan, 1978; Weisbord, 1978). For example, the instructional problems resulting from a high concentration of low-income pupils in a school may be
resolved by providing additional funds and other resources to those students with the announced expectation that more money somehow will "make a difference." Few resources within the district are devoted to researching or analyzing the way alternative instructional strategies might remedy the pupils' academic deficiencies. Public attention is instead directed by school personnel towards the extensiveness of the districts' symbolic conformity, e.g., the districts' use of approved texts, the number of credentialled professionals, compliance with state curricular mandates, even though there may be little evidence that these factors make any substantial difference in student learning.

We have argued that school districts have up until now been largely successful in protecting their instructional or technical activities from close public scrutiny or criticism even though the public has long had influence over other vital organizational matters, especially capital outlays and student regulation. In these matters, Lieberman (1977) has observed that, at the local level, schools are among America's most publicly influenced institutions. School district policies have been controlled by state laws and regulations. And school districts have become dependent on federal and state financing to aid them in addressing what are considered pressing social problems, e.g., reducing racial isolation, mainstreaming handicapped pupils, etc. Compliance indicators almost always accompany such funds, thus lessening local discretion (Halperin, 1980; Kirst, 1980).

Permeable Boundaries

From an open systems viewpoint (Katz and Kahn, 1978; Rogers, V., and Rogers Argarwala, R., 1976), school districts can be viewed as engaging in
a continuing interaction with many proximal and distal environments, e.g., parents, community, state and federal agencies. School districts, as organizations, indeed seem to have very permeable boundaries (Pfeffer & Salancik, 1978).

Districts differ, of course, with regard to how they are affected by this boundary penetration. Some communities, schools and district personnel are left relatively unnoticed to do their jobs in whatever ways they see fit. In other communities there may be considerable heat around particular instructional issues. Controversy over school issues may come and go. The federal and state impact on schools is similarly varied. Some small districts have very few students who are the recipients of federal or state attention. Consequently, these districts remain relatively free of this type of external regulation. Other districts, larger or in urban settings, have many such pupils and therefore receive considerable funding -- and experience considerable outside regulation which may begin to impact on their instructional programs.

And, the type of federal regulation differs from situation to situation. For example, federal regulations have sometimes required that norm-referenced test instruments be used as the means of documenting program effectiveness. On other occasions, courts have outlined the specific nature of the test data acceptable as evidence of district competency in providing equality of educational opportunity. Given the power of the legislative, executive and judicial branches of both federal and state governments to impose sanctions for lack of compliance (e.g., withdrawal of funds, court-ordered busing) some school districts are finding it necessary
to publicly discuss and justify the effectiveness of their technical activities -- that is, their instructional program.

This breaching of school district boundaries by federal, state and local groups in the area of instruction is a relatively new phenomenon. Not all observers view this trend as necessarily ameliorative or logical (Wise, 1977). It does seem possible, however, that such penetration, if it continues, may result in major changes in the internal functioning of schools and districts, especially in relation to characteristics such as goal diffuseness and loose coordination.

**Loose Coupling**

A current and widely held view of the internal operations of public school districts is that, as compared with some other bureaucracies, they are loosely coupled (Weick, 1976; Meyer and Rowan, 1978). This means that control, supervision and sanction linkages among individuals operating at the various levels of the system -- central administrators, principals, classroom teachers -- are weak. The intent and meaning of messages may become diffused or altered as they pass up or down through the various administrative levels. As a result, directives, orders or regulations from the central administration may be ignored, misapplied, or only partially implemented at lower levels without serious consequences.

Loose coupling is a useful metaphor for describing the authority chain in public school districts. But the work of several researchers (Abramowitz, 1978; Daft and Becker, 1978; Downs and Mohe, 1976; Lortie, 1977; Spence et al., 1978) suggests that the loose coupling designation should be applied differentially and selectively to particular aspects of
school district functioning. That is, administration in those areas of public concern which are objects of regulation seem to be tightly coupled and policies are enforced very directly and effectively. For example, central administrative policies regarding pupil control (e.g., use of corporal punishment) or school scheduling (e.g., beginning and ending times for the school day) are usually closely monitored and fully implemented in all schools and classrooms.

However, in areas hitherto exempt from public regulation, e.g., teaching strategies or classroom management, loose administrative coupling appears common (Firestone, Herriott, Meyer, et al., 1978; Meyer and Rowan, 1978). Central administrators rely on "confidence and good faith" with regard to teachers' instructional decision making. The tradition of teacher autonomy (Lortie, 1975), reinforced by increasing teacher union power, weakens the ability of central administrators to influence teachers' everyday classroom behavior and instructional decision making. Schools and classrooms, in terms of instruction, can be thought of as being federations or collections of zones of influence (Lortie, 1977; Miles, 1980). Decisions about technical matters -- i.e., instruction -- rather than being centrally determined, widely disseminated and carefully enforced are, instead, parcelled out to those who have the immediate and direct responsibility for action.

To summarize: It is our view that school districts can be characterized as organizations in which there is a weak technical core, that is, only a small body of professional knowledge regarding how to cause student learning. The fact that instruction is not a certain science but an
uncertain craft is usually hidden from public view. The school district's organizational boundaries are easily breached by outside public agencies and groups each of whom makes what is assumed to be a legitimate claim to influence policy and practice. In general, school districts operate with diffuse goals which do not function as internal planning guides to tailor policy, but rather are external symbols, demonstrating to the public the institution's value. Central administrative decision-making units especially in the technical-core instructional areas function with a great deal of autonomy from one another.

It is no wonder, then, that management strategies to coordinate testing and evaluation activities with instruction do not naturally occur within school districts even when we take into account the limitations imposed by the technical problems of test selection or development, analysis and interpretation. Generic organizational characteristics resulting from school districts' relationship to their external environments act as disincentives inhibiting the internal use of testing and evaluation for instructional improvement. Thus, it is not surprising to find that even districts which spend considerable time and resources to collect test data about student achievement for shipment to outside agencies do not analyze these data in any systematic way so as to improve their own instructional program. Similarly, districts which produce evaluations of district programs often do not use these evaluative studies as ways to improve programs, but, rather as signals to outside agencies that they are in compliance with regulations (Zucker, in Bank & Williams, 1982).
It follows that those school district administrators and policy makers who have forged a system-wide testing/evaluation/instruction linkage have contended with these generic characteristics in some manner.

SITUATION SPECIFIC CONDITIONS WHICH OVERRIDE GENERIC FACTORS

Given these generic characteristics of school districts, one might assume that no districts would be linking their testing and evaluation activities with their instructional decision making. Yet, we were able to identify a sample of districts that were clearly trying to forge such a linkage. Why? What were the conditions or characteristics of these districts that seemed to account for their overcoming these generic inhibitions?

What were the specifics around these factors that have allowed some school districts to develop management systems that link their testing programs with classroom instruction? Why do some districts in addition to using student test scores as evidence of student learning use other evaluative data such as parent, teacher and student opinions and questionnaires to identify educational inputs which may be related to outcomes? Why are they interested in providing to teachers, principals, planning teams or central office administrators information which is of use in modifying present instructional practice so as to enhance future learning? Although each of the school districts we studied was unique, all of our "heroic" districts exhibited characteristics in common, which, in combination, were sufficient to help them overcome natural obstacles.
All the districts we studied indicated that a major reason for beginning to coordinate tests and instruction was their desire to raise pupil achievement as measured by test scores. District officials indicated that test scores were considered as a surrogate description of student achievement. They believed that testing and evaluations using test data could then be used to guide them in making informed instructional decisions at the school site or district level.

Their direction and activities can be explained by what are considered incentives, that is, unique internal or external pressures or drives that moved them to act. For example, some central offices seemed moved in this direction by explicit mandate from courts, or from state legislatures or from school boards. In other districts, superintendents or other officials reported that they were influenced by research or university thinking, and decided to use available federal and state money to build their own instructionally relevant tests. In many of the districts there had been expressions of dissatisfaction, coming from parents and teachers, with the academic performance of students. Thus, in one district, administrators first started to use test scores to identify students needing remedial help. In another district, however, there was general parent and teacher satisfaction with student learning. However, the district superintendent and others in the central office felt that a system of individualized instruction might further increase the learning of average and above average college-bound students.

We can categorize the types of incentives we found as either external or internal to the district central office, as in Figure 1.
Figure 1

Types of Incentives

External to the District

- requirements by federal or state legislative, executive or judicial agencies to:
  - evaluate programs
  - develop courses of study
  - raise test scores

- availability of federal and state money for:
  - text development
  - evaluation of programs
  - staff development
  - relationships with universities

- community dissatisfaction with public education expressed through:
  - press and media
  - loss of students
  - Board action

- existence of techniques or procedures to analyze test in an instructionally relevant manner

Internal to the District

- belief by administrators that instruction could impact test scores -- a "vision" of enhanced student achievement

- district desires to acquire additional funds

- knowledge by administrators of technical aspects of testing and evaluation

- desire for improved district image in the eyes of the community, profession
But our list of incentives, to some extent, begs the question, since these are often found in other districts as well. We were still uncertain as to why some districts reacted to these incentives by moving to link testing and evaluation with instruction when others didn't.

Given our small sample, and our field-based research design, we cannot provide a definitive answer to that question. What we feel is reasonable to assert, however, is that particular internal conditions seemed to be present in each of our six districts. Each of our districts developed a particular vision of how to respond to a challenging situation and assembled the management capacity to make it happen. Four internal conditions or characteristics exist across districts which seemed to be critical; they were: idea champions (Daft & Becker, 1978), stable core staff, comprehensive problem analysis, and tolerance for delay and ambiguity.

- Idea champions -- by this we mean individuals in key administrative and policy positions who firmly believed in some variation of the following position: that classroom instruction could be conceptualized in terms of student learning outcomes, that tests of student learning outcomes and evaluations of instructional activities could be used to relate instruction to learning, and that district policies and procedures should be attentive to this linkage.

In our districts, the presence and constitution of these idea champions were essentially variations on a common
theme. The common theme was the emergence of a critical mass of individuals who believed in the power and potentiality of their linking process. The variations related to their evolution and make-up. These critical masses of individuals generally started with one person and a small but eventually growing cadre of followers. The organizational role of the person with this initial vision varied -- some were central administrators with varying responsibilities, some in testing, some in curriculum, some were central line administrators. Soon this critical mass grew to a point where it included influentials in all of these roles -- and this group engaged the support and confidence of the top central administration and school board.

Stable core staff -- in our districts, this critical mass of "idea champions" and their followers had been around for a while. In those districts with the most advanced linkage systems, it took more than five years for the linkage programs to develop and mature. A stable core group even with some additions or deletions, continued to work rather steadily at the process over several years. They were thus able to "ride out" the shifts in district directions that sometimes accompany shifts in school board memberships or other exogenous shocks (e.g., court orders, changes in funding levels).
Comprehensive rather than ad hoc problem analysis on the part of district managers. The core staff stayed aware of next steps beyond the immediate task of the moment. Typically our district core groups did not develop elaborate, multi-year blueprints of their projected activities. They did have a comprehensive "sense" of where they were going and the steps that were necessary to get there. It is one set of tasks to develop, for example, a CRT program in reading -- it is quite another set of tasks to actually get teachers to use it. Bridging the gap between development and use implies an understanding of the school site and district as a social system and an appreciation of the various strategies and tools that might be most effective.

Tolerance for delay and ambiguity -- the personnel within these districts were aware of, and accommodated to a development strategy that was uneven, interrupted, and in some cases often postponed. Components of the linking system often developed independently of one another; each sometimes had different purposes and each had its own set of advocates. Creating arrangements to merge together these disparate pieces into new configurations took time, patience, administrative talents, and adherence to the overall "idea" rather than to specific details.
The above list is not exhaustive. It may be that these same characteristics and activities are found in many districts that have not tried or who have tried and abandoned efforts to develop a linkage system between tests, evaluation and instruction. All we can say at this juncture is that these characteristics are present in our sample districts, and district administrators believe these characteristics contributed to their districts' progress.

Goals. As we noted previously, districts often adjust to their organizational boundary permeability by promulgating diffuse or general goals. Although such goals may function well symbolically, their lack of specificity makes it difficult for district managers to formulate long term plans. Our six districts did not differ from the general case, here, in terms of clearly stated goals for developing their system. Ultimately, however, some, but not all, of them emerged with clearly stated goals for instruction.

Rather than developing a carefully sequenced, long-term plan of action, our districts had a general vision towards which they were driving. When appropriate, they changed the specific activities and procedures, but the general vision remained before them. All began with the idea of instruction conceptualized in terms of student learning outcomes and stressed this in a variety of ways.

They legitimized and shaped informal discussions as well as policy decisions around the idea of student learnings which could be tested, and around educational activities which could be described.
They found allies for such an instructional orientation among opinion leaders within the central office and teachers and principals.

By presenting a vision to various subgroups, they raised morale, and transformed feelings of helplessness into feelings of empowerment.

They reinterpreted the district's past and present activities in the areas of testing, evaluation and instruction so as to provide the rationale for future activities relating to a more comprehensive data-based instructional improvement system. This process of reordering some of what had already been done was especially noticeable in districts' writing of proposals for new funds.

The overall planning for a data-based management system that occurred was akin to that described by Lotto, Clark and Carroll (1980).

"Conceptually, planning is not a "synthetic" management function but an essential part of the way in which individuals in organizations make sense of and create their organizational reality."

"Operationally, all organizational participants should be considered to be active planners. Consequently, those individuals assigned formal administrative responsibilities for planning should view themselves less as managers, initiators, and monitors and more as stimulators, facilitators, and orchestrators."

Administrative coupling. In many districts, units which carry out functions relating to curriculum, instruction, supervision, administration, personnel, and budgeting often operate semi-autonomously. That is, staff members within each of these operating units rarely have formal
opportunities to share their skills and expertise with one another in relation to overall instructional improvement policies. This is especially true in large districts.

The same observation can be made about teachers -- that is, that they work autonomously behind closed classroom doors (Lortie, 1975). To be sure, teachers may be visited by principals and other supervisors, especially during their probationary term, but for the most part teachers are largely unsupervised when it comes to the day-to-day interactions they have with their pupils. Usually, the relationships between each teacher's methods and his/her pupils' learning, are largely unknown and can at best only be estimated (Goodlad, 1974). In many districts we have a curious situation where what would seem to be the most important interaction in a schooling system, that is, teacher classroom behavior and its effects on pupils' learning, is largely unattended to in any direct supervisory manner by the central district office. Most school districts, when it comes to managing their most important interactions -- namely the interaction between teachers and pupils and the effects thereof -- are loosely coupled (Meyer, 1977; Weick, 1976).

In our six districts, however, coordinating mechanisms were developed which horizontally linked central office units into a management team and which vertically linked central offices with schools and classrooms. Several types of coordinating mechanisms were used. In smaller districts, central office staff had informal and social relationships with one another -- going to lunch together, talking in the corridors and between offices. In larger districts, staff meetings, ad hoc task forces,
cabinets, councils, and other types of working groups were used to link central office operations.

In some districts, strong linkages were established between operations at the district level. In others intra-school coordination coordination was stressed. For example, in one district, the central office staff development unit worked very closely with the testing unit. Analyses of student test scores were quickly translated into staff development programs for defined groups of teachers. But, at least during the early years in this district, curriculum people were not brought into the discussion. In another district, each school had a media specialist and a learning specialists who interacted on an ongoing basis to coordinate assistance to teachers in grouping students for instruction, providing them with remediation, enrichment texts or worksheets. The principal routinely visited classrooms and discussed classroom management with teachers.

In our large district, management of the entire district was regulated by instructional considerations. Principals supervised teachers in relation to pre-specified district-wide "Elements of Quality" which were expected to be in evidence in each classroom. Principals in turn were supervised by central office personnel in terms of the extent to which teachers were adhering to district processes. Test scores, both criterion-referenced and norm-referenced, were used to monitor student progress. On an annual basis, areas which students appeared not to be learning were identified; analyses of instruction, texts, teaching strategies were then made to determine if action should be taken.
VARIATIONS AMONG THE SIX DISTRICTS

Briefly, we have alluded to factors which were present in districts which developed an information-based instructional management system. Now, we will describe some of the dimensions on which the districts varied.

District management systems differed from one another along at least three dimensions: purpose, extent of coordination, and locus of decision-making.

**Purpose of System: Narrowly or Broadly Defined**

Some districts narrowly defined the purpose of their system as RAISING STUDENT TEST SCORES. Their purpose was to raise overall student test performance or the performance of particular subgroups. In these districts, some of the following activities to link testing and instruction were undertaken:

1. modifying instruction to fit whatever tests were being used, that is
   - analyzing the current tests by the domains of knowledge skills represented by the items
   - indexing textbook content to test content
   - increasing instructional time on tested skills
   - developing practice materials for tested skills
   - teaching to test items

2. finding tests which fit district instructional objectives, that is
   - developing or reviewing districts' scope and sequence of objectives
   - analyzing available tests against district's instructional objectives by grade level, topic, etc.
   - selecting the best match of commercially available tests
   - developing CRT's
using student achievement test scores to target teachers for training, that is
- analyzing student performance by teacher/by subject/by grade level
- increasing teachers' skills in student-deficient areas through staff development
- monitoring teaching by principal or by staff development specialist

developing remedial summer, pullout, or in-class programs for students
- identifying student deficiencies
- target teaching towards skills as required by test

Other districts were more comprehensive in how they stated their purpose. They defined the purpose of their system as INSTRUCTIONAL MANAGEMENT. Their idea was to assert district responsibility for student learning by making learning the focus of all district operations. Some of the following activities to link testing and instruction were undertaken:

- developing a consensal district philosophy about educational goals, about quality educational environments, about methods of teaching
- communicating this philosophy to boards, advisory groups; informing and training administrators, teachers, in district philosophy and procedures
- establishing supervisory relationships between central office and schools and within schools to ensure compliance
- coordinating texts, tests, teaching at the school level
- coordinating curriculum, instruction, supervision, evaluation, and staff development at the central office level

Extent of Coordination: Partial or Integrated

Districts differed from one another in the complexity of their coordination arrangements.
PARTIAL COORDINATION was characterized by some or all of the following:

- informal links among a few people. E.g., teachers received test scores with or without principal intervention; with or without central office intervention; and decided themselves what use to make of scores in relation to individual students, groups of students or the entire class.

- formal links among a few people, e.g., central office, principals, teachers, were assigned responsibilities in relation to dissemination of, communication about, and action on test scores.

- On an ad hoc or routine basis, pairs or small clusters of central office staff met to discuss district-wide implications.

- On an ad hoc or routine basis, school principals met to discuss district-wide implications.

- On an ad hoc or routine basis, individual school staffs met to discuss school-wide implications.

INTEGRATED COORDINATION was characterized by some or all of the following:

- Within central offices. Central office staff responsible for testing, evaluation, instruction, curriculum, supervision, staff development met regularly to analyze student achievement as assessed by test scores and other methods. They also reviewed district policy, planning, practice.

- Within schools. School staffs, advisory groups met regularly to review test scores and other evaluative data to develop school level approaches to problems or areas of concern.

- Between central offices and schools:
  - links between central offices, schools and classrooms in regard to instruction were formal with clearly defined job responsibilities and accountability.

  - many ad hoc and permanent meetings -- principal's councils, advisory groups, task forces, met to consider instructional improvement

  - colloquial atmosphere and informal relationships leads to exchange of information
Locus of Decision-making: District, School, Classroom

The foregoing discussion of purpose and coordination alluded to several different levels at which the basic decisions were made about translating the analyses of test scores into changes in instructional activities. Our sample districts arranged their systems so that critical decisions were made either at the central office level, at the school level or the classroom level.

CENTRAL OFFICE decision-making was characterized by one or more of the following:

- district-level construction of grade-level objectives by subject areas
- district-level construction of criterion-referenced tests
- district-wide selection and use of a norm-referenced test
- district-wide evaluation of instruction through classroom visits, surveys, etc., of instructional efforts
- district-wide formulation and conduct of staff development programs
- district-wide selection of texts to match tests

SCHOOL LEVEL decision-making was characterized by one or more of the following:

- school-level planning teams, teacher/parent/community
- school-level receipt of information about student outcomes from either teacher-created tests, teacher-option CRT's, district-wide mandated CRT's; district-wide norm-referenced tests
- school-level conduct of instructional evaluation via supervision, teacher self-reports, district evaluations, outside evaluations
- school-level planning for school-year activities
school-level allocation of services, both personal and financial, to support local plans

school-level decisions about texts

CLASSROOM LEVEL decision-making was characterized by one or more of the following:

- individual teacher receipt of information about student learning, e.g., norm-referenced test scores, CRT's, teacher observations, text tests, student assignments, etc.

- individual teacher decisions about grouping, remediation, enrichment, alternative instruction, etc.

- individual teacher participation in professional development activities

CONCLUSIONS

As we have noted previously, our research is limited to six "heroic" districts that are trying to link testing, evaluation and instruction. These districts were not selected randomly. Thus the reader will appreciate the cautionary nature of the conclusions that follow. These conclusions are offered in the spirit of trying to anticipate concerns or questions of evaluators or school district decision makers who might be considering developing or further implementing some effort to link district testing, evaluation and instruction. We will briefly discuss five conclusions that we hope will be helpful.

Conclusion 1. Perhaps the most important conclusion is that some districts have demonstrated that building such a t/e/i system can be done and it can have a beneficial effect on the district. The districts differed with regard to how far they had progressed and how satisfied they were;
some had made considerable progress resulting in a variety of benefits, e.g., increased pupil performance, staff feelings of efficacy, greater sense of organizational purpose and direction. Because we have not conducted longitudinal studies we can reach no conclusions about the permanence of these t/e/i systems; however, the systems in operation for the longest time had developed a sizable "critical mass" of staff who were trained and experienced in using the program. Presumably they can resist any immediate attempts to substantially reduce or prematurely change the t/e/i system.

Conclusion 2. There is no one single method or design. The district systems differed considerably in such factors as: the role of inservice; types of testing; evaluation designs; delivery systems; centralization of decision making. The reasons for these differences are not entirely clear but they include such factors as: community and district traditions; externally mandated practices; university-influenced planning; and evaluator and administrator personal or professional biases. In the most successful districts, these elements had been fitted together into a logical system.

Conclusion 3. The sequence for developing and implementing a t/e/i system varied from district to district. That is, the process these districts developed for building such a system did not conform to standard linear planning models. The sequence usually involved an "idea champion" at some point in the district's history who saw that certain activities were in place or emerging. He or she then began shaping the evolutionary wave that was building. Often the "idea champion" selected or focused on some procedure or technique, e.g., inservice training, CRT program, and built the t/e/i linking system around that activity.
Eventually, others joined the effort and a system of coordination and shared decision making developed. Indeed, even in the most experienced districts the systems are continually evolving as districts are buffeted by exogenous shocks in the form of budget cuts, population shifts, desegregation efforts. Given the presently turbulent nature of public schools, it seems likely that this evolutionary process will continue for some time. The whole process takes time. The modal time span from initiation to full operation of the t/e/i linking system in our districts was approximately eight years.

**Conclusion 4.** Given the generic conditions of schools we discussed above, school district linking of testing and evaluation with instruction is not a naturally occurring phenomenon. All of these districts have had and continue to suffer setbacks in their efforts. Districts need constant and vigorous leadership. What is more, in many districts some members of the critical mass leave the district for various reasons. This requires that they and their ideas be replenished in some way.

**Conclusion 5.** Linking tests and evaluation with instruction is first and foremost an analytical problem. There is no single way, there is no universal schema. Successfully implemented systems appeared to be the result of capturing what was available and folding and bending it so that it fit into the local situation. This isn't to say that system development was totally a reactive process; indeed, the district leadership actively had to adjust local practices and procedures to the ideas of such a system. All of this took thought and a realistic appraisal of local conditions, local traditions, local personnel, and local resources. But first
step had to be understanding and analysis. Such analytical processes were the necessary but not sufficient condition, for building and implementing an effective t/e/i linking system.
References


Spence, L.D., Takei, Y., & Sim, F.M. Conceptualizing loose coupling: Believing is seeing or the garbage can as myth and ceremony. Paper presented at the meetings of the American Sociological Association, 1978.