SCHOOL DISTRICT MANAGEMENT STRATEGIES TO LINK TESTING WITH INSTRUCTIONAL CHANGE

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Summary: Based on two years of field work in six school districts, I discuss in this paper some conditions which appear to be present in school districts who are trying to manage the dissemination and use of test data for instructional change. I then describe three strategies—or, more precisely, three configurations of linkage activities—which we saw in our districts. Finally, I list several characteristics which these strategies have in common, and suggest some implications for school districts interested in the management problems associated with connecting testing with instructional change.

Introduction

This paper is a trial balloon. It is a think-piece in which I am formulating ideas that have evolved from two years of field experience in school districts and in schools as well as from continuous dialogue among CSE project staff. Egon Guba in his CSE monograph (Guba, E., 1978) notes that naturalistic research occurs in expansionist and reductionist waves, waves which alternate between discovering data and making sense of data. Here and now, with this wave, we are reducing and making sense of the data. Your comments and questions will help in this process.

Let me briefly summarize how we "discovered" the data. We selected six school districts, through an extensive nomination process, who had a reputation of "doing something interesting" to link their testing or evaluation activities with instruction. Our teams then spent several person-

weeks in each district talking with and interviewing as many as forty individuals per district, from Board members and parents to principals, teachers and students. We started by trying to understand what these individuals thought they and their district were doing in relation to testing or evaluation and instruction. In other papers, we discuss what we learned about how the districts came to be doing what they were doing, and what impact their policies appear to be having. Here, we will only try to make sense of what they say they are doing, or what we observed them to be doing, to link testing with instructional change.

And, even within this narrowed framework, we are putting aside a whole range of important technical questions, among them the quality of the tests themselves, the initial match between the test and instruction, the procedures used to analyze test responses. All of these are essential to connect testing programs with ongoing instruction, but for the moment, we are relegating them to the sidelines in favor of discussing management concerns. And, we are not even addressing what we regard as important up-front management issues—such as the involvement of the community and teachers in the selection or development of the testing instruments. We are today looking at only the "back-end" of the testing process—the dissemination and use of testing for instructional change.

Just a word about definitions. By testing we refer to district-wide testing programs in which specified populations of students respond on norm-referenced achievement tests or criterion-referenced diagnostic tests or proficiency examinations or state assessment programs. We are excluding from this discussion teacher developed quizzes or unit tests embedded in curriculum materials. And, by data-based instructional change, we

mean any decision or activity resulting either from the tests themselves or from an analysis of students' test scores that alters the way in which teachers and children in classrooms feel, think or behave.

Before proceeding, I want to make three brief preliminary comments about the concerns and assumptions that Dick Williams, my co-director on this project, and myself bring to our research effort. First, we are interested in school district administration in the area of testing, evaluation and instruction and the effect of district policies and procedures on schools and classrooms within the district's preview. The activities and attitudes of principals and teachers are sometimes viewed in isolation from district influence--as if these individuals' work environment was bounded by the building itself and the attendance area of their students. One aspect of our work, therefore, is to explore the extent to which district management of tests and of instruction and of the link between them-good or bad, strong or weak, loosely or tightly coupled--impacts schools and classrooms. Second, we know that, over the past fifteen years, awareness about tests and the capacity to use them have been developed in many district central offices. We are curious as to whether that capacity can be turned from satisfying outsiders'--that is, federal and state legislators or administrators--demand for information to stimulating insiders-that is, administrators, principals and teachers--towards instructional change. Lastly, and most importantly, we are more concerned with instruction than with testing, and we recognize that it is likely that there are other, more potent instructional improvement levers around. Nonetheless, since testing is ubiquitous in American schools and since test scores seem to have the potential to catalyze instructional change, we have

been investigating how this might happen.

Conditions Needed to Link Testing With

Instructional Change

Let us turn to our six districts--one small, two medium and three large--and report some of what we found.

We found all six districts in the midst of tumult and problems. Other researchers, such as Mary Kennedy in Huron's recent study of 18 districts found similar situations (1980). Among the crises effecting our districts were: court interventions into both desegregation and instructional matters; massive population shifts requiring the closing of some schools, possibly the opening of others; large numbers of children with first languages other than English; budget cuts; low teacher morale; vociferous and divided community opinions on the goals schools should emphasize, etc.

We found four districts where instructional programs, testing programs or evaluation cycles had been developed in response to the availability of federal or state fundings. Many people in these districts had spent time writing grant proposals and reorganizing their operations to meet categorical program requirements. However, in two other districts, administrators had resisted the federal temptation and made do with general funds.

We found, for the most part, capable people in district offices, in schools and in classrooms, doing their jobs and concerned about children's learning. Within and across districts there were some teachers, principals, administrators and parents who were frustrated at problems they saw as beyond the possibility of improvement.

We found central office organization charts which defined district operations such as curriculum, instruction, testing and evaluation, personnel, budgeting, subject area specializations, elementary/secondary school supervision, etc. Sometimes these charts told us how people performing these functions consulted with, or reported to one another, and to principals, teachers. Sometimes not. From the formal organizational arrangements, it was not possible to infer what districts were doing about instructional improvement.

The above partial listing of findings foreshadows the conditions that we now regard as essential, even if not sufficient, to the creation of a management strategy to link testing with instruction.

Three conditions that were present in varying degrees and manifestations in all six of our districts, and which we infer to be <u>sine qua nons</u> of a data-based instructional change management strategy were:

- Motivation -- that is, the presence of some strong impetus or collection of incentives;
- 2) Idea champions--that is, the presence of leaders or a critical mass of others who have knowledge and interest in both tests and instructional improvement, and who occupy positions from which to mandate or persuade others of the legitimacy and likely payoff of this approach;
- 3) Delivery system--that is, coordination among competently run operations within the central office; and communication channels between the central office and the schools.

We'll take these essential conditions one at a time and describe what we found in our six districts, four of which had been evolving their strategies for more than eight years, two of which were relative newcomers with only a two year history. Needless to say, most districts regarded their efforts as "in progress," even those that appeared to us most successful.

 Motivation: impetus and incentives. In each district respondents told us that they as professionals were concerned and frustrated by the low levels of student achievement as evidenced by test scores. Their frustration was often echoed by parents, the media, and the school board. However, the specific catalysts which turned this general concern into district activities differed from district to district. They included combinations of the following:

- Court directives to raise test scores as an indication of district good faith in providing equal educational opportunity;
- Federal and state evaluation or testing requirements accompanying categorical program funding;
- c. State requirements to develop competency testing programs;
- Availability of federal or state grants to develop basic skills tests;
- Board policies directing the establishment of fundamental schools district-wide;
- f. Board policies directing the development of criterionreferenced testing systems;
- g. Parent pressure for higher rates of admission into college, better vocational preparation;
- h. Influential district staff--committed by previous graduate training or in-service professional contacts--to a test-teach-retest-reteach instructional cycle.
- 2. Idea champions (Daft & Becker, 1978). We cannot overemphasize the importance of what we have come to call, familiarly, the "care-clout" factor. In each of our districts there was someone, either by him or herself or with a small group of colleagues, who cared—and persisted over a long time in that caring—about using either the tests themselves, or the students' scores on the tests as a level to improve instruction. This person was not necessarily the highest official in the district. In one district, a relatively low status administrator

allied himself with the Board president to promote his ideas (and ultimately himself). In another district, the director of the research and evaluation unit who pushed this test-instruction linkage later became the superintendent. In a third district, a new superintendent allied himself with a very well-liked supervisor of curriculum to provide the direction and energy for initiating a district-wide strategy to link testing with instruction. But, in every case, the idea champion had or soon acquired formal or informal clout.

In our six districts, the idea champions did not seem to plan or implement their activities in a goal directed fashion. Rather, they had a general vision towards which they were driving, encouraging others to make use of opportunities as they occurred. They did one or more of the following:

- Legitimized and shaped the informal as well as policy decisions concerning data-based instructional improvement;
- Found allies among opinion leaders within the central office and teacher and principal groups;
- c. Reinterpreted or reconceptualized the district's past and present activities so as to provide the rationale for future activities. This process of reordering some of what had already been done was especially noticable in districts' writing of proposals for new funds;
- d. Mobilized energy, raised morale, and transformed feelings of staff and teacher helplessness into feelings of empowerment;
- e. Restructured the rewards and sanctions within the district.
- 3. <u>Delivery system</u>. In many districts, operations of units which carry set functions relating to curriculum, instruction, supervision, administration, personnel, budgeting often operate

autonomously. Staff members rarely have formal or informal opportunities to share their problems, perceptions of goals, etc. with one another. By the presence of a delivery system in our six districts, we mean not only the performance in competent and timely fashion of activities connecting testing with instruction. We also mean the existence of coordinating mechanisms—whether they be meetings, memos, informal conversations—that insured the meshing of activities at the district, school and classroom levels. Our six districts ranged widely in the number of divisions, units, schools or classrooms which were either centrally or peripherally involved in data-based instructional change. They also ranged widely in the formality and frequency of intra-organizational arrangements for talking about, deciding on, implementing or monitoring data-based instructional change.

Here is an example of one district which seemed to us to have a well-developed delivery system. Here, the individuals—often a combination of staff, principals and teachers—responsible for developing the curricular scope and sequence, for constructing the criterion—referenced tests, for organizing staff development courses, for ordering new books and media, for hiring new teachers, for developing budgets, interacted frequently with one another on an informal level, talking with one another in the halls and in one anothers' offices. They also had frequent and regularly scheduled meetings. Each respondent reported regarding the promotion of student learning on specified objectives through the test—teach—retest—reteach cycle as a strong influence on the

way in which he or she carried out job related duties.

In another larger district, by contrast, the delivery system was less well developed. For example, the development of criterion-referenced tests was handled within one unit, the norm-referenced testing program was handled by a second unit, and staff development was carried out independently of these activities. Interaction among individuals, even those with shared concerns, was largely accidental, depending sometimes on previously formed friendships or associations. Although contact between central office staff and principals was frequent and formally scheduled,

several principals told us that they often heard conflicting stories from different central office unit personnel.

In our six districts, then, we found that there had been specific incentives to raise student achievement levels by using the tests, that there were idea champions intentionally moving these ideas into action, and there was some form of delivery system wherein the activities undertaken by various units of the district were coordinated with one another and communicated to relevant audiences.

Management Strategies

Our districts were engaged in many tasks, each of which might be regarded as an isolated activity to connect testing with instruction. Rather than list the activities individually, however, we have grouped them into configurations. Each configuration or strategy represents a more or less coherent management orientation within districts. Some districts had "clean" management strategies—using only one orientation—while others had "mixed" strategies, that is, pursuing simultaneously activities which

seemed to belong to several configurations. The three strategies are:

- A personnel-improvement-orientation staff development strategy;
- A building-oriented problem solving strategy;
- 3) An instructionally-oriented objectives-based strategy.
- 1. A personnel-improvement-oriented staff development strategy. One of our districts used this strategy explicitly in conjunction with the objectives-based strategy. Another advocated this strategy as the key to data-based instructional change. In this latter district, central office staff reasoned that the student population within each of their schools was heterogeneous and becoming more so, that teaching and principal staffs were stable and likely to remain so, that teachers themselves made the major difference in student learning, so
 - District officials wrote grants for federal and state money to conduct district-wide inservice.
 - They integrated the construction of state proficiency tests with staff development courses, training teachers in writing objectives and items.
 - District staff checked district-constructed state proficiency tests as they were developed against high school course offerings, found skills which were not being taught, organized teacher committees to develop materials, provided staff development to teachers newly assigned to teach that content.
 - District staff analyzed students' State Assessment Program test scores by subscale, checked textbooks against subscale content, checked teachers' instruction time against subscale content and organized staff development courses for particular teachers on how to teach those identified skills.
 - District staff required all teachers' attendance at courses on how to teach using diagnostic/prescriptive techniques, where the diagnosis was to be informed by students' test scores.
 - District staff required principals' attendance at courses on supervision and on diagnostic/prescriptive instruction; and then

mandated that principals were to spend 50 percent of their week in classrooms observing and facilitating instruction.

- 2. A building-oriented problem solving strategy. Two large districts were using this strategy. Their central office staff reasoned that the schools in their districts, by reasons of history, geography, or present ethnic populations, represented distinctive organizational entities. The principal, teachers, parents, students and surrounding community were regarded by themselves and by the district as the primary actors responsible for improving students' learning; therefore, these individuals together should be identifying problems and devising solutions, assisted by whatever district support seemed advisable. So (and these examples come primarily from one of the two districts)
 - The evaluation branch provided to principals, teachers and Title I coordinators printouts of norm-referenced (mandatory) test scores as well as results of the annual School Information Survey.
 - The Curriculum and Instructional branch distributed to schools the criterion-referenced (voluntary) test scores.
 - The evaluation office appointed local school evaluators whose responsibility was to interpret to principals and their staffs the results of norm-referenced test data. These local school evaluators sat in, where requested, on beginning of the year school planning meetings where school level goals for the year were made based on areas of need identified from test score patterns. During the year, local school evaluators responded to principal, teacher, and parent advisory board requests for test interpretations and instructional directions to pursue.
 - The evaluation office encouraged in a pilot set of volunteer schools a process called local school budgeting which involved parents, teachers and principals in data collection and analysis activities designed to inform the school's allocations of its annual budget revenues.
 - Area supervisors asserted (although without monitoring or sanctions) the principals' responsibility for using these printouts in school site planning and in conference with individual teachers and classroom management and about individual students.

- 3. An instructionally-oriented, objectives-based strategy. Two districts, one large and one small, seemed to be using this strategy. Each had started approximately eight years ago. Each came to adopt a highly structured diagnostic/prescriptive instructional model supported by a scope and sequence outline of objectives, a criterion-referenced testing system under continuous revision to keep it updated and de-bugged, media and materials cross-referenced to objectives and to the tests. In one district, not only was there a tight connection among curriculum, instruction and testing, but there was also
 - Compulsory staff development for principals, teachers, aides, volunteers and substitutes during school hours. Between sessions teacher-taught model lessons within the classroom were observed by the staff development coordinator and the principal;
 - Released time for teachers and principals to attend conferences on instruction and teaching;
 - Weekly district-wide principal meetings to discuss individual school and across-district problems;
 - Clear delineation of roles and responsibilities from board members through to aides, with follow-up and monitoring of performance of one level by the next higher level.;
 - Support resources for teachers in the form of a learning specialist available to help plan classroom management based on CRT printouts, work with individual children.

In neither of these districts did the objectives-based orientation imply top-down decision making. Rather, in both, there was a high level of communication and involvement between operations in the central office, as well as a high level of participation of teachers and principals in thinking about, doing and reflecting on data-based instructional change.

It should be noted that, conceptually, each of these strategies could

have been managed in either a tightly or a loosely coupled manner (Weick, 1976), thus making six possible strategies. The differences between tight and loose coupling would show up most clearly in the feedback and monitoring aspects of the coordinating mechanisms which exist among central office operations and between them and the schools. The two districts which used the instructionally oriented management strategy appeared to us to be more tightly coupled than the other four, but this may not be an inevitable accompaniment of a particular strategy.

Characteristics of Management Strategies

What we have said so far is this. In our six districts—where there has been a publicly acknowledged intention to move in the direction of data-based instructional change—there also has been some relatively specific impetus or incentive that stimulated the process; one or more individuals who have acted as idea champions; and some set of district structures which coordinated their individual action in relation to linking testing with instruction. District—wide strategies to link testing with instruction seem to be oriented in one of three directions: towards staff development where the emphasis is on influencing individuals' attitudes and behaviors; towards local school buildings where the emphasis is on involving school staffs in data-based problem solving; towards administratively—oriented tight coupling where the emphasis is on a minimum set of clearly—defined instructional objectives.

We'd like to offer some impressionistic characterizations of these strategies.

Uniqueness. Although we ourselves found it possible to generalize

about configurations or strategies, we were struck during our visits by the uniqueness of what each of our six districts was doing and how they explained their reasons for their activities. That is, the handling of linking activities in each district seemed to have been influenced by idiosyncratic factors such as local history, local geography, the image of the district in the eyes of the public and of the people who worked there, local politics both within the community and within the district, immediate events, crises or funding availability. Especially important seemed to be the personalities of and power relationships among the people within the district. Although we tried to avoid it, we could not help observing to one another the cliches about "education being a people business" and "people matter." It seemed to explain much of the variability among districts.

Non-exclusiveness. A second characteristic that occurred to us was the non-exclusive nature of what districts were doing. The strategies for linking testing with instruction, while important in the minds of many of most of our respondents, was only one of the involvements and concerns that occupied their workday; and sometimes other crises or problems sidetracked, either for a few days or for much longer periods the concern with databased instructional change.

Additionally, no district had what might be called a blueprint or a masterplan for this particular subset of concerns. Some individuals, in two of the districts, expressed their sense of what the data-based instructional change jigsaw puzzle might look like once all the pieces were in place. We found the jigsaw puzzle metaphor to be a useful one. In some districts, we could infer that most of the boundary edge pieces were

identified along with many of the inside pieces. In other districts, there may have been large pieces on the table, but there seemed to be available, as yet, no straight-edged boundary pieces to enclose them.

Episodic. Finally, and clearly related to the preceding point about the piecemeal nature of the strategies, is our observation about the evolution of the strategy itself. Instead of being linear and sequential—that is, instead of proceeding in an orderly way from planning or organizing, implementing, evaluating and recycling—the management of data—based instructional change was episodic and moved on a broken front. Activities speeded up or slowed strategies down in accordance with deadlines or other scheduled events. Implementation—that is, action—often took place in the absence of any explicitly stated plan. Formal plans were sometimes generated after the fact in order to explain the actions that had occurred.

Implications

We will be spending the next year working with district representatives on a Guidebook for managing data-based instructional change. In advance of this work, we would not want to elaborate all the implications of these observations for school districts who want to do something about data-based instructional change, but we can make some obvious points.

- It appears that district-wide management of data-based instructional change can and does occur. Some districts have moved a long distance toward management strategies in which testing is linked to instruction in ways that are intended to improve student learning.
- 2. It appears that any data-based instructional improvement change process is complex and slow to evolve. It requires people

- with skill and knowledge not only in the substantive aspects of testing and instruction but in the management aspects of conceptualizing, organizing, directing and monitoring.
- important in shaping the strategies which districts use to manage data-based instructional change. Although there are generic issues and cross-cutting conceptualizations which can be identified by research and by experience and which would be helpful for district personnel to know, there is likely no simple standardized formula which districts can follow. Instead, districts, having decided that this is a course they want to pursue, must get all the help they can assemble and then build their strategy out of locally-available ingredients.

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