The speaker concentrates on the effects of statewide accountability implementation on school system management and on the state's delivery of educational services. In discussing the need to link accountability systems with existing organizational systems, the speaker spends the majority of his time examining how the New Jersey efforts relate to four organizational paradigms: the formalist approach, the operating unit approach, the heuristic approach, and the ad hoc approach. (Author/IPT)
The Effects of Accountability On an Administrative System and Its Influence on Organizational Policy

by

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Outline

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A Disclaimer

The T and E Accountability System is like an elephant. Depending upon where you stand, one has a different perspective as to the nature of the beast. The point of view presented in this paper is only one point of view from one vantage point. Others involved in developing the New Jersey system might describe it differently.

These remarks are a tentative effort to put the New Jersey model into a context of organization analysis. Reactions are welcome.
I. Introduction to the New Jersey Problem

The New Jersey State Constitution of 1875 directed the legislature to:
provide for the maintenance and support of a thorough and efficient system of
free public schools.

In 1903, the legislature placed responsibility on the State Board of
Education and through it, the Commissioner, to take steps to implement the Con-
stitutional Amendment. This legislation authorized the Commissioner to: inquire
into and ascertain the thoroughness and efficiency of operation of any of the
schools of the public school system of the State...

In 1973 suit was brought against the State in the Courts of New Jersey
charging that Robinson, the plaintiff, was not receiving educational opportunity
equivalent to that existing in other communities. The Courts (Robinson vs. Cahill)
deciding for the plaintiff, directed the legislature to define the educational
obligation intended by the phrase "thorough and efficient" and to develop a plan
of financing to meet the Constitutional mandate.

Historically, public education in New Jersey has reflected local autonomy.
In recognition of this tradition, the Joint Education Committee of the New Jersey
Legislature called for a plan which would test efficiency of education as a
"steadily growing and evolving concept" which would vary with present and changing
need of both the State and each school district and community.

This process, known as the establishment of a "thorough and efficient"
system of public education, has been established by the State legislature (Chap-
ter 212, Laws of 1975) and upheld by the NJ Supreme Court (Jan. 29, 1976) to
provide all children in New Jersey regardless of socio-economic status or geo-
graphic location, the educational opportunity which will prepare them to function
politically, economically, and socially in a democratic society. Basically the
law requires each local education agency to develop an educational process plan,
including outcome and process goals, in terms of educational aspiration for learner
achievement. These goals must be determined with maximum citizen involvement and
must include a definition of performance indicators and standards necessary to indicate achievement of these goals and objectives; a monitoring of the local system and the provision of corrective action where necessary to ensure adequate progress toward the achievement of these goals and objectives particular to the local education agency. The accompanying needs assessment will be employed to identify "gaps" in the performance of local education programs and requires each LEA to implement plans for school improvement based on their priority needs.

One important result of the T & E process will be that for the first time we will have a much more precise picture of what program needs exist. Analysis of these needs and available R & D outcomes will assist us in developing additional dissemination strategies and will identify "gaps" in the available R&D products thus providing guidance for the targeting educational development.

The law provides also for a new distribution of state aid aimed at reducing the discrepancy for educational opportunity between rich and poor districts.

The new legislation has two thrusts, one of monitoring and school approval aimed at ensuring that the provisions of T & E are carried out and, secondly, and most educationally, the aim of school improvement. The role of monitoring and approval is clearly vested in the SEA. The aim of school improvement is vested with the LEA. It is the LEA which sets its goals; assesses needs; sets standards, curriculum and plans for school improvement. The legislation is clear that the SEA can only intervene in the local school program if the LEA fails to take appropriate action. However, while the legislation does not mandate an SEA role in school improvement, LEAs expect assistance in this area. However, they expect this assistance in a manner which will not jeopardize their autonomy.

Since 1968, New Jersey has been experimenting with a dual state intermediate unit structure. County Offices of the State Education Agency have existed
In the state since 1903. These units have traditionally focused on operational and regulatory tasks. In 1968, an Educational Improvement Center was initiated to serve the developmental and improvement needs of an eight-county region of the State. In 1977, an additional EIC was established to focus on the improvement needs of another region of the State. Two more EICs are being developed.

In order to implement T&E, the Department of Education has been decentralized. The role of the County Units will be expanded and carry the major responsibility of monitoring and school approvals. Two additional Education Improvement Centers have been initiated so that all sections of the State will be served. This will result in a functional organization illustrated in Figure 1. It is assumed that monitoring, approval, and regulatory services are best carried out at the county level of the SEA. However, improvement assistance resources appear to be more efficiently organized in regional centers.

The primary point of contact is the Educational Improvement Center (EIC). Soon there will be four of these to serve different geographical areas of the State. They are primarily "diffusion or dissemination" units providing awareness information, involvement (demonstration, planning for adoption/adaption), and commitment (Training, Consultation and nurture services) activities.

It is important to note that this process marks a shift from the regulatory model of state educational agencies to an accountability model. Through the 1950's most SEAs were primarily regulatory agencies. From the start of the Sputnik era in 1957, there was a spurt of curriculum development activities which became a preoccupation of many SEAs. That spurt begin to fade in the late 1960's and early 1970's as many if not most school systems adopted new curriculum and experienced an intrusion of substantial numbers of new, younger teachers who had more exposure to new pre-service curriculum training.
Now, in the 1970's we are faced with a substantial teaching cadre which will remain in place for the next several decades. Relatively few new entries to the teaching profession will be experienced. Thus the accountability demands on education must be supplemented by an approach to educational renewal and professional revitalization.

In order to make this shift from a SEA oriented to the regulation of educational input requirements (augmented by relatively traditional curriculum services) it was necessary to deal with different organizational paradigms.
IMPLEMENTING THE LAW - WHO DOES WHAT?

EDUCATIONAL IMPROVEMENT CENTERS
- Identify & provide alternative models for goal setting, diagnosis & setting objectives
- Collect, analyze & tabulate program needs
- Assist districts plan & provide in-service training
- Identify & deliver assessment & evaluation alternatives

LOCAL SCHOOL DISTRICT
- Results desired
  - Set goals
  - Assess needs
  - Develop objectives
- Establish an educational plan to achieve the desired results
- Program needs
- School programs
- Prog. alternatives
- School operations

COUNTY SUPT. OFFICE
- Insure selection & implementation of goal setting, diagnosis & setting objectives
- Approve plan
- Review budget & monitor implementation
- Approve plan
- Provide technical assistance for school operations
- Insure compliance with rules & regulations
- Validate results & recommend approval

RESULTS ACHIEVED
- Evaluation tools

Figure 13
Figure 12: Organization Functional Diagram
II. Four Approaches to System Development

Boguslaw has argued that all attempts at the design of an organization or administrative system can be represented by one of four paradigms. (1) These four approaches or paradigms are:

- the Formalist Approach
- the Operating Unit Approach
- the Heuristic Approach
- the Ad Hoc Approach

Boguslaw reminds us that:

".....It is important to observe that some systems may be required to deal only with established situations; others may be required to deal only with emergent situations and still others may be required to deal with both established and emergent situations."

In New Jersey, since the advent of the five year term of the new Commissioner in July 1974, we have been attempting to deal with the transition from a shaky or uncertain established situation to an emergent situation which is still somewhat tentative due to the reluctance of the Legislature to fund the legislation which it passed in September 1975.

It is useful, therefore, to review each of the organizational paradigms for their implications with respect to organization design and policy implementation.

To begin with, we might suggest that a "formalist" design of a state education agency would be the traditional bureaucratic, centralized, hierarchical type of organization concerned with relatively straightforward regulatory functions.

In this kind of organization it is assumed that somewhat homogeneous standards applied to different areas ranging from teacher certification to school buses to curriculum content areas makes it relatively easy to write the rules and regulations by which the bureaucratic personnel conduct their daily public business.

This kind of structure for a state agency (of any kind) resembles the large, unitary type of corporation described by Oliver Williamson(2) as a U-form structure. The U-form structure is the "natural" or the intuitively obvious way to organize multi-functional tasks, especially if there is a high degree of consensus as to what is the nature and significance for each task within the organization. When the organizational focus is on the prescriptive regulation of many of the input requirements of education, such a U-form type of organizational structure is to be expected. Indeed, many S.E.A.s still resemble that model.

Generally, however, the problems from this rather formalist model stem from three sources: First, the very largeness of the organization restricts and inhibits communications and a somewhat dull inertia often becomes the organization tone and this may become offensive to the more creative specialists within the organization. They find little outlet for their creativity and initiative, etc.

Second, because of external demands such an organization may tend to grow too large; these demands may create new regulatory sub-heirarchies and existing personnel tend to be too specialized to be redeployed, but are seldom eliminated.

Third, as new types of responsibilities and priorities emerge, the

established formality of the U-form of hierarchy tends to resist or reject the new functions as well as the personnel brought in to fulfill those new functions. For these reasons (and others could be suggested) the formalist type of organization is poorly designed to handle unpredictable or improbable situations. Indeed, the hierarchical nature of a formalist approach to an organization will require almost deliberate distortions of behavior; functional units seeking to respond to emergent needs have no established procedures which work--they are unable to communicate or cooperate within a structure in which everyone's responsibilities are predetermined to meet the agreed-upon traditional needs.

On the other hand, the almost complete opposite of a formalist design for an organization is an Ad Hoc design. The Ad Hoc design for an organization involves no commitment to the organization chart as a model for the organization. Instead, it proceeds with a view of "present reality" as the only significant constant; every course of action is a function of the then-existing situation. The crisis-oriented responses to urban riots in the mid 1960's were a good example of the Ad Hoc design process. It is easy for the Ad Hoc designed organization to be completely adaptable to emergent situations; if it is successful at that, it may also be condemned for being "opportunistic," and "disruptive" of traditional institutions and practices.

At any given time it might be appropriate for at least several units of a large organization to be operating under an Ad Hoc design. (During the Cuban Missile crisis the National Security Council acted under an Ad Hoc design for President Kennedy). At any given time the Chief Executive of any large organization is likely to maintain a small executive staff which is organized on an Ad Hoc way to be responsive to emergent problems.

However, as a problem is better defined or more clearly perceived, the organization should seek a more systematic approach to its resolution. (In some
organizations a futures planning group has the responsibility for "look out" studies and to suggest possible forms of reorganization in response to emergent problems).

An Ad Hoc approach to an organization may also be appropriate when there is no clearly defined view of the future system, e.g., when there is a legislative or judicial impasse. Under such conditions incremental determination and decisions are made to keep the organization in a state of motion.

In the New Jersey State Department we have been operating a T and E planning group in an Ad Hoc fashion since the passage of the legislation in September 1975. A T and E service unit and a group of T and E design directors have been drawn from the several established divisions. It is anticipated, however, that these functions will be spun out after the appropriate developmental work has been completed. As T and E evolves it is likely that a continuing invention of ad hoc groupings will be necessary. These groupings will have a life span of perhaps one week to six months.

Somewhere between the established order served by a formalist design and the emergent situation requiring an Ad Hoc design is the mixed case. As we come to better understand how the emerged situations may transform or effect the established order, (e.g., as consensus is reached on how "thorough and efficient" education relates to existing educational practices), there is the need to design an organization to deal with its own evolution. This will involve either an Operating Unit Approach or a Heuristic Approach, or perhaps both.

The Operating Unit Approach to organization design is less concerned with either models of the organization or with the ad hoc reactions to the changing situations. It is more concerned with people (or procedures) carefully selected to possess certain performance characteristics.

Under this approach the performance characteristics desired by the organization system are specified and personnel procedures (including both staff selection and inservice training) are selected to reflect or exhibit those
characteristics. Obviously, since people can adapt and procedures can be changed, this approach includes a range of flexibility. Under some conditions, it may be efficient to limit the "range" of that flexibility to insure reliability and predictability of the performance of the system.

In fact, many prevailing innovations in education such as "open classroom," I.G.E., and so forth fall within the operating unit paradigm. Specifications for the teacher's management of the classroom are developed and become part of in-service training. That portion of the T and E model which is the responsibility of the County Offices reflects a similar orientation.

The County's responsibility involves the School Approval Process and the School Program Coordinators represent an Operating Unit Approach to educational improvement. By specifying a "T and E" planning process for schools and a series of monitoring functions (or behavior) for the School Program Coordinators, we have chosen this approach to design a system to implement "Thorough and Efficient" education. At the same time, the "guidelines" developed provide a range of flexibility within the framework of the School Approval Process. At this level the guidelines and the steps of the process represent a code of behavior for that level of the educational organization. Performance within that "code" can be evaluated, and it can be regulated or improved through in-service training and so forth.

At the same time, however, the overall organization requires a mechanism for (1) generating an evermore appropriate code of educational conduct, and (2) inventing solutions to educational problems which fall outside the specified behavior of the School Approval Process. Indeed, the School Approval Process has been specially designed as a set of behaviors which will discover "discrepancies" between educational aspirations and achievements. Here the shift has been from bureaucratic practices concerned with insuring that certain specified input criteria have been met to a concern that an appropriate sequence of planning
behavior is being carried out. Within that sequence of planning it is possible to indicate that a range of techniques for goal setting, needs assessment, etc. represent good planning behavior. The monitoring job of the New Jersey accountability system is to insure that such appropriate behavior occurs, e.g. that schools do engage in national planning and modern management in developing and implementing an educational plan. It is essentially a process model of accountability with the emphasis, not on a mechanistic plan, but on good planning behavior. One of the outcomes of that good planning behavior is the discovery of discrepancies; this discovery then triggers a demand for improvement, a demand for a new solution to be invented by the R & D process.

This takes us, therefore, to the "Heuristic Approach" to the design of an organization system. The Heuristic Approach to System Design is one that uses principles to provide guides for action; it is not bound by preconceptions about the situations (or discrepancies) which the system will encounter. Its principles (called heuristics) should provide guides even in the face of completely unanticipated problems.

The Heuristic Approach is really the old problem solving approach, leading to innovative solutions which are either new inventions or the imaginative adaptation of existing solutions.

The reader should be warned that this is not the currently legitimate dictionary connotation of the word "heuristic". The dictionary will tell you that heuristic is an adjective meaning to discover or to stimulate investigation. But it is really much more than a nondescriptive adjective (indeed we shall repeatedly use it as a noun as well as an adjective in the following pages). Its contemporary connotation in the data processing field is attributable to the efforts of Allen Newell, J. C. Shaw, and Herbert A. Simon, who call their truly creative innovations in computer-programming techniques "heuristic programming". These techniques are designed to facilitate higher order problem solving by computers in such areas as symbolic logic and chess. Basic to these techniques is the use of operationally stated action principles providing directions to a computer faced with an unanalyzed or unanticipated situation. It might also be suggested that the repeated success of certain problem solving behavior guided by some general heuristic may lead to it being incorporated into the prescribed code of educational behavior.
Some heuristics associated with educational R and D have been these:

- a proposed solution should be designed to demonstrate solutions to critical educational needs.
- the proposed solution should be "portable" to other schools and districts.
- the solution should be cost-effective.
- etc.

It should also be obvious that the solution seeking behavior of the Educational Improvement Centers (EICs) with respect to the educational remediation demanded by the discrepancies discovered by the School Approval Process cannot be regulated ahead of time by closely specifying that behavior. Instead the activities of the EICs must be governed by heuristics similar to those associated with educational R and D.

This problem solving approach to educational problems can operate at several levels. At the highest level there is a need to translate the "grand goals" of education - those beliefs of social purpose - into attainable, practical objectives. This involves the principle of sub-goal reduction - we substitute for a grand goal a set of more practical goals, - sometimes called objectives.

At a second level the heuristic approach to educational problem-solving has to be skeptical of the established claims of any particular solution developed elsewhere. The principle has to be a practical one - how can this proposed solution be made to work in this particular context?

At a different level this heuristic approach introduces almost a subjective morality into the accountability process. If better outcomes (however those are defined) is the overall goal for accountability, anything which can get you that outcome and which can make those involved in creating that outcome feel better is a viable solution.
Behind this last idea is the admission that some features of educational systems are already unalterably fixed. Although we assume that we can change some of the behavior of some of the actors in some of the system over some of the time, we realize that we can not specify all of the behavior of all of the actors in all of the system all of the time. Any education solution which requires that kind of commitment to a substantial alteration of behavior is doomed to failure.

In fact the heuristic approach to organizational design must allow for substantial independent behavior. The crux of the problem therefore is to insure that the independent behavior is governed by an agreed upon set of new values, and those new values must reflect the demands of accountability. This may seem too simple but the realization must be that getting educational practitioners to be continuous problem solvers is an innovative breakthrough. Too much of the traditional emphasis in education has been the development of "reliable operating units" through the careful specifications of their input criteria (so many credits in reading, a course in tests and measurement, etc.)

The New Jersey system of T and E does something else - It states that schools and districts must engage in a series of behaviors to discover their needs, their problems, and so forth. Then, supported by the technical assistance resources of the OCRs, the practitioners in those schools and districts, must engage in a solution-seeking school improvement process. Instead of focusing on Why Johnny can't read and defending the educational status quo, the system is driven by the new value that all schools should become better schools. The focus of the practitioners in each school must be on making that a better school all of the time. What this establishes, quite frankly, is that accountability is everyone's business and that the business of accountability is never finished.

Let me further note however that the proper management of any large scale
organizational system involves components which reflect each of the four paradigms. None of the paradigms is without its problems or without substantial value.

An heuristic paradigm is not without its problems: First it could lead to "too much" independent problem-solving so that no accountability is achieved at all. Some kind of referral-evaluation can perhaps deal with this issue.

Second, the problem-solving approval can be too open-ended, too time consuming and can quickly exhaust resources. An heuristic organizational style needs to be restrained by a set of priorities so as to insure some focus and to insure that some "solutions" are found within a reasonable period of time. As with "pure" research, "pure" problem-solving can often become an end in itself.

Third, the heuristic model also leads to conflicts between generalists and specialists. Specialists have invested time and resources into deepening and intensifying their ability to perform in highly specialized situations. Problem-solving generalists tend to be skeptical of such commitments and wish to get the specialist to redefine the problem to which he is applying those specialized situations.
III. A Series of Organizational Heuristics

Up until now this paper has discussed the system out there. It is intended that the New Jersey State Department of Education function as a decentralized department. The behavior and processes which represent the accountability system in New Jersey cannot occur in a centralized bureaucracy. But at the center of the system a number of responsibilities must be retained.

These include:

First, System Maintenance which includes the relatively routinized services of financial auditing, the resolution of quasi-legal disputes and a number of certification functions. These represent the "formalist" component of the organization.

Second, System Leadership which involves the role of the Commissioner and his executive staff in the interaction of the educational system with the external environment which attempts to govern the public schools. Accountability per se has its origins in this external environment and the Commissioner of Education has the primary responsibility of responding to those externally imposed conditions. This role is uniquely an ad hoc role, especially in terms of fiscal uncertainty and political turbulence.

Third, System Development involves the need to be able to re-specify the desired behavior of the system out there as it evolves its monitoring and improvement functions. Insofar as there is the ability to specify "behaviors" which work, a developmental and dissemination system can prescribe solutions which include packaged behaviors. To this extent the old Division of Curriculum and Instruction has a new responsibility to focus on critical priority areas such as special education, compensatory education and basic skills for which specialized programs are available. This becomes a selective "operating unit" approach.

Fourth, A Systems Guidance Capability is the on-going responsibility of the planning and evaluation functions. These functions not only must report the results being experienced by the accountability system, they also have the responsibility of proposing and revising priority agendas. Here a series of organization heuristics are used to guide planning and evaluation activities.

These organization heuristics are worth noting--they form the basis of a macro-planning system.

A Macro-Planning System

"Planning" as a generic professional activity has gotten a bad name for several reasons. Among these reasons is the attempt of planners to do
"comprehensive" or "master" planning. In most real world administration situations, policy is normally made in an incremental fashion. Decisions are seldom made "comprehensively." Incremental planning, however, is also flawed—it is too reactive and crisis-oriented. We consider that planning needs to be "futuristic" or forward looking, and "systemic" in that it looks at all elements in the system, but also be reality-based in that it recognizes the value of small decisions.

We prefer a planning system which can be characterized by the heuristics "open," "collaborative," "semi-formalized" and "priority management."

By "open" is meant an attempt to involve as many key actors from as many impact areas as possible. With the notion that there are systems within systems and systems inter-facing with other systems, any notion of systematic growth and development (sometimes called change) must always recognize that some minimum threshold level of participation of all elements relevant to the system (both internal and external elements) is required.

By "collaborative" is meant the idea that a planning group brought together to represent some minimum cluster of elements should focus on objectives which they have in common and not in their differences. Alternatively, different program objectives can be identified that represent different interests which are not incompatible.

By "semi-formalized" is meant the realization that policy planning always involves a mix of informal as well as routinized processes. So-called "ad hoc" planning tends to be too informal and demands endless coordination and valuable consumption of staff time. The system cannot always be "planning to plan;" it needs as well the proper management of priorities. Some planning processes therefore should be prescribed and formalized.

By "priority-management" the macro-planning process is directed primarily to areas of emerging new concerns in both a proactive and a reactive sense.
Problems and priorities can be identified and put on the planning agenda by either policy analysis or by political activity. The macro-planning process does not necessarily have to be mobilized to include planning operations which are relatively routinized when program goals and objectives are well established and program responsibility well defined. (It is assumed that operational planning is routinely followed by most, if not all, elements of the system--A well functioning M. I. System would "store" the bulk of the program plans of the several divisions). These plans would be routinely reviewed by the Commissioner and he would provide for their regular revision. As new problems and priorities develop, the Commissioner might provide that some well established program be recycled through the macro-planning process to insure a proper interface with new and emerging programs. Similarly, a "needs assessment" might generate knowledge of a discrepancy which a program might be directed to deal with by revising its operational plans. This can be related to the "management by exception" style; in such a fashion the "intelligence" and "resources" of the organization are directed to the management of first-order priorities and not to the supervision of routines.

We might further note an "indicative" aspect of the macro-planning process. The need for a system to be futuristic in its orientation means that it needs some sketchy "road maps of the future."--If future states of the system and its environment can be described and understood, the alternative means to reach or alter those states can be indicated.

Policy planning therefore assumes the function of indicating alternative ways by which the system might grow and change. It does not, however, necessarily prescribe which way is "best;" such determination is the responsibility of higher level judgments in the political process.

Some general goals for the macro-planning system can be suggested. These might be:
formulate and identify alternative policies for education problems and opportunities

derive alternative program strategies for each alternative policy

mobilize and consolidate resources behind chosen policies (distribution of resources to different programs across organization lines)

maintain an analytical overview of policy and program development through both policy research and a management information system.

The relationships within the macro-planning system are based upon a notion of "multiple review points" which considers alternative formulations of the problem and of the range of alternative policies which could be developed as a response to the problem.

The importance of this kind of analysis is that the heuristic component of an organization system must reveal the overlying values of its problem-solving activity. Here again the effort can be identified as establishing the accountability of an accountability system.
CONCLUSION

These have been fragmentary and somewhat disjointed notes on some organizational perceptions having to do with the development of a statewide accountability system.

There are two important things to note. First, there is a need to be selfconscious about organization style as efforts are made to design an appropriate organizational response to new external demands. There is also a need to avoid holding only a single perspective. That is why the use of four organizational paradigms appear to be useful.

Second, the organizational paradigms also identify the need to recognize different organizational styles. No single style is more important than any other. It all depends upon the different kind of demands made upon the organization. Different organizational styles need to be made compatible within the same organizational system. Recognizing the underlying functional requirements behind these styles is important to the success of organizational policy.