ABSTRACT
                To explore the principal's role as instructional
leader in school improvement strategies, this research brief focuses
on characteristics of effective schools, a profile of effective
principals, and a discussion with Dr. Steven Bossert, Associate
Laboratory Director for Research and Development at Far West
Laboratory in San Francisco, California, about an organizing
framework for examining the instructional management role.
Limitations on the inquiry include effective school researchers'
inability to determine cause and effect relationships with certainty
and the difficulty of identifying exactly the combination of factors
that make up effective schools. Effective school characteristics
identified involve instructional management factors (such as time on
task, class size, curriculum content, and evaluation of student
performance) and school climate factors (such as discipline, safety,
staff development, and parent participation). A profile of an
effective principal emerges from a consideration of his or her role
in four areas: goals and production emphasis, power and
decision-making, organization/coordination, and human relations. Dr.
Bossert answers questions about the principal's role in an effective
school, procedures to enhance creative instructional management
practices, and general characteristics of effective principals. A
table outlines the four areas of principal leadership; two figures
provide a framework for examining instructional management and an
instructional management model. (PB)

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EFFECTIVE PRINCIPALS: KNOWLEDGE, TALENT, SPIRIT OF INQUIRY

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EFFECTIVE SCHOOLS: THE GAP BETWEEN RESEARCH & PRACTICE

Every school can be effective. This is the promise embedded in the findings of recent research on effective schools. The characteristics of effective schools identified by these studies are not unusual or exotic. They are within the grasp of administrators or teachers who are seriously interested in improving instruction: strong leadership; increased instructional time; a structured, orderly environment; clear goals; teacher expectations of high student achievement; and closely monitored student progress. These and other indicators of successful schooling practices have been grouped by researchers into five clusters:[1]

- Leadership
- Classroom instruction and management
- School climate or environment
- Curriculum
- Student evaluation

Applying these factors is not a simple matter. Both researchers and practitioners recognize that any school improvement effort must look at all five of these factors. Change in only one area will probably not affect the overall effectiveness of the school. Furthermore, all five areas must be addressed concurrently, and must be part of a comprehensive

plan that includes all aspects of both the structures and the instructional processes of the school. The school improvement process has been described as neither "mystical nor terribly complex, but it would seem to demand an organic conception of schools and some faith in people's ability to work together toward common ends."[2] Schools are all different, and what needs to be done at one school is not necessarily the best approach for another.

Given the available information about effective schools' characteristics, what do we really know about improving practice? How can these research findings be helpful to principals and other instructional leaders interested in planning school improvement strategies? While there is no formula or prescription for creating an effective school, there are both some general guidelines and some specific practices that administrators and teachers can incorporate into their planning strategies.

This research brief will attempt to help bridge the gap that exists between the research findings and their applica-tion in individual schools by focusing on one of the key factors in any school improvement strategy--the role of the principal as instructional leader. What are the characteristics of an effective

principal? The profile presented here will be a composite view of those characteristics and actions associated with the role that have been found in the research to be closely linked with school effectiveness.

In addition to identifying some of the characteristics of effective instructional leaders, we also need to ask if there is a framework or a model for looking at the principal's role in terms of the whole system of the school, a framework that will enable the principal to plan school improvement activities in terms of his or her own context. One such framework will be described.

The information presented here from a synthesis of the research findings and from a discussion with Dr. Steven Bossert, Associate Laboratory Director for Research and Development at Far West Laboratory, is intended to stimulate the principal's own inquiry process. Each finding needs to be viewed in terms of the principal's own situation. Because each school is unique, this attitude of inquiry is an important ingredient that should remain active throughout both the planning and implementation processes. The questions raised may not be answered immediately, or they may lead only to still more questions, but as new information becomes available and improvement strategies continue to evolve, the importance of this aspect of the assessment and planning process becomes clear.

EFFECTIVE SCHOOLS RESEARCH: PROCEED WITH CAUTION

Both researchers and practitioners have noted the limitations of the various studies in terms of presenting models of school effectiveness that can guide the process of school improvement. [3] Before looking at some of the specific research findings about school effectiveness, it may be helpful to review some facts about effective schools research: [4]

- Factors that can be manipulated to improve schools are common to all schools. They include attitudes, community involvement, goals,

instruction, leadership roles, parent involvement, facilities, skills, staff, and students.

- The way in which these factors are manifested varies from setting to setting in equally effective schools.

- The exact combination of factors that make up the effective school is not known.

- Research has not determined the relationship between cause and effect. For example, there is a correlation between strong leadership and effective schools, but it is not known which comes first. Does an effective principal create an effective school or does an effective school influence the principal to behave in certain effective ways?

- "Effective schools" are usually identified by measuring student achievement in the basic skills.

HOW CAN THE RESEARCH HELP?

In spite of its limitations, there is much to be gained from the results of the research studies and from the testimony of educators who have some experience with various improvement strategies. For example, researchers have found that certain characteristics of instructional management and school climate have a positive correlation with school effectiveness. Some of these characteristics are listed here with a brief summary of the research findings relating to them.

CHARACTERISTICS OF EFFECTIVE SCHOOLS

Instructional management factors

1. Time on task

   Time spent by a student engaged on a task that can be performed
   with high success and that is directly relevant to an academic
   outcome is called Academic Learning Time (ALT). The basic com-
   ponents of ALT are allocated time, student engagement and high
   success. Findings related to these components state[5]:

   - The amount of time allocated to instruction in a particular
     curriculum content area is positively associated with
     student learning in that content area.

   - The proportion of allocated time that students are engaged
     is positively associated with learning.

   - The proportion of time that learning tasks are performed
     with high success is positively associated with student
     learning.[6]

2. Class size

   As class size increases, achievement decreases. A pupil who
   would score at about the 83rd percentile on a national test
   when taught individually would score at about the 50th percentile
   when taught in a class of 40 pupils. The difference in being
   taught in a class of 20 versus a class of 40 is an advantage
   of 6 percentile ranks. The major benefit from reduced class
   size are obtained as size is reduced below 20 pupils.[7,8]

   In addition to influencing achievement levels, class size has
   also been shown to influence other outcome measures such as
   classroom processes and learning environment, student attitudes
   and behavior, and teacher satisfaction. In each of these areas,
   reduction in class size is associated with higher quality
   schooling and more positive attitudes. These class-size effects
   are most notable for children 12 years and under, and least
   apparent for pupils 18 or over.[9]

3. Curriculum alignment

   The extent of the "match" or alignment of instructional objectives,
   activities, and evaluation is correlated with achievement gains
   in the basic skills.[10]

4. Curriculum content and organization

   At the secondary level a planned, purposeful curriculum is more
   sound than the approach of having many electives and few require-
   ments. At the elementary level the curriculum must focus on the
   basic skills and complex skills students are expected to achieve.
   Students must have enough time for instruction in those skills,
   and those skills must be coordinated across grade levels and pervade
   the entire curriculum.[11]

5. Evaluation/feedback

The effective school environment promotes monitoring of student
performance more than other school environments. The frequency
and timeliness of feedback given to students is associated with
success in learning and achievement.[12] The data suggest that
the immediacy of the feedback given by the teacher to the student
is positively associated with student achievement.

6. Task characteristics

Students learn more when the learning tasks are clearly
presented. If the tasks are too complex and require extensive
organization time, student achievement decreases.[13]

School climate factors

1. Expectations

Administrators and teachers in effective schools have higher
expectations for student accomplishments than do staff in other
schools. This attitude is reflected not only by the school's
goals and staff attitude, but also by the school environment.[14]

2. Staff task orientation

In an effective school environment, the staff is highly task-
oriented. They start classes on time and do not end lessons
early. They approach their professional responsibilities
seriously and maximize the academic learning time.[15]

3. Discipline

Less time is spent on behavior management in an effective school
environment.[16] As corporal punishment increases, achievement
scores tend to go down. [17] Evidence exists indicating that clear,
reasonable rules, fairly and consistently enforced not only can
reduce behavior problems that interfere with learning but also
can promote feelings of pride and responsibility in the school
community. [18]

4. Safety

The effective school maintains an atmosphere that is safe and
does not distract from the learning enterprise. Better physical
conditions for students include clean rest rooms, good meals,
building and grounds maintenance, and access to telephones.[19]

5. Cooperation/consensus

The research indicates that teachers in effective schools cooperate
with each other on tasks and also work with the school leaders
who coordinate many of the planning and development activities.[20]
Teachers need to feel represented in the decision-making process
and supported by the school's leadership as well as its resources.

6. Instructional leadership

Research indicates that the instructional leader in an effective
school has strong views about what constitutes good instruction
for the school and is active in planning and coordinating the
academic work of the school. He or she sets high academic standards,
stays informed of policies and teachers' problems, makes frequent
classroom visits, creates incentives for learning, and maintains
student discipline.[21]

7. Staff development

In order to influence an entire school, staff development
should be school-wide rather than specific to individual teachers
and should be closely related to the instructional program of
the school. Staff development should be based on the expressed
needs of the teachers and directly relate to the goals of the
school. The effort requires long-term support and reinforcement.
It is likely that staff development presented as a form of
remediation for teachers deficient in certain skills will encounter
resistance.[22]

8. Parent participation

Some studies indicate that increased parent participation has
a positive effect on student achievement.[23] It is noted, however,
that the nature of parents' involvement appears to be related to
ethnicity, income level and effectiveness of the school. Though
the evidence is mixed, it is reasonable to assume that parents
need to be informed of school goals and student responsibilities,
especially with regard to homework.[24]

PROFILE OF AN EFFECTIVE PRINCIPAL

Focusing on the role of the instruc-
tional leader, research findings indicate
that, while the role is characterized in
several different ways, there are certain
attitudes and behavior associated with
effective leaders. A profile of an
effective instructional leader can be
created by considering his or her role
in four areas:[25]

1. Goals and production emphasis.
Principals in high achieving schools tend
to emphasize achievement. This involves
setting instructional goals, developing
performance standards for students, and
expressing optimism about the ability of
students to meet instructional goals.
This behavior is often called instruc-
tional leadership, and the principal's
performance in this area is apparently
central to the establishment of a school
climate that supports achievement.

2. Power and decision making.
Effective principals are active in the
decision making process, especially in
the areas of curriculum and instruction.
In addition, principals of successful
schools are effective in the community.
They know community power structures
and maintain good relations with parents.

3. Organization/coordination.
Principals in effective schools devote
more time to the coordination and
control of instruction and are more
skillful at the tasks involved. They
do more observations of teachers' work,
are more supportive of teachers' efforts
to improve, and are more active in
teacher and program evaluation procedures
than principals in less effective schools.
Principal involvement in classroom manage-
ment also appears important to school
success. By controlling public spaces,
by stressing discipline, and by handling
disciplinary problems in their offices,
principals buffer the instructional core
from disruptions.

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4. Human relations.
Effective principals recognize the unique styles and needs of teachers and help teachers achieve their own performance goals. They encourage and acknowledge good work by teachers.

Table 1 summarizes some of the tasks or actions associated with each of the four areas. This list illustrates how principals influence all three levels of the school's social system--classroom, school, district. It is the school-level activities, however, that form the core of the principal's instructional leadership role and it is with these activities that the analysis of the individual principal's role begins.

TABLE I
Four Areas of Principal Leadership

I. Goals and production

   a. Set instructional goals
   b. Emphasize achievement by developing performance standards for students
   c. Express optimism about the ability of students to meet instructional goals

II. Power and decision making

   a. Become actively involved in decisions relating to curriculum and instruction
   b. Mobilize support for instructional goals within the district
   c. Know community power structures
   d. Maintain good relations with parents

III. Organization/coordination

   a. Devote time to coordination and control of instruction
      1. conduct frequent observations of teachers' work
      2. discuss work problems with teachers
      3. be supportive of teachers' efforts to improve
      4. set up teacher and program evaluation procedures
   b. Become involved in classroom management
      1. arrange structured learning environments where students are actively engaged in tasks
      2. support teachers with discipline problems
      3. act as a buffer to protect the instructional core from disruption
      4. support special projects
      5. distribute informational materials
   c. Clearly spell out program and curricular objectives for the school
   d. Coordinate school-wide content, sequence and materials
   h. Establish school-wide procedures for placement and promotion of students

IV. Human relations

   a. Help teachers achieve their performance goals
   b. Acknowledge good work by teachers

Personal Characteristics

District Characteristics

External Characteristics

Principal Management Behavior

School Climate

Instructional Organization
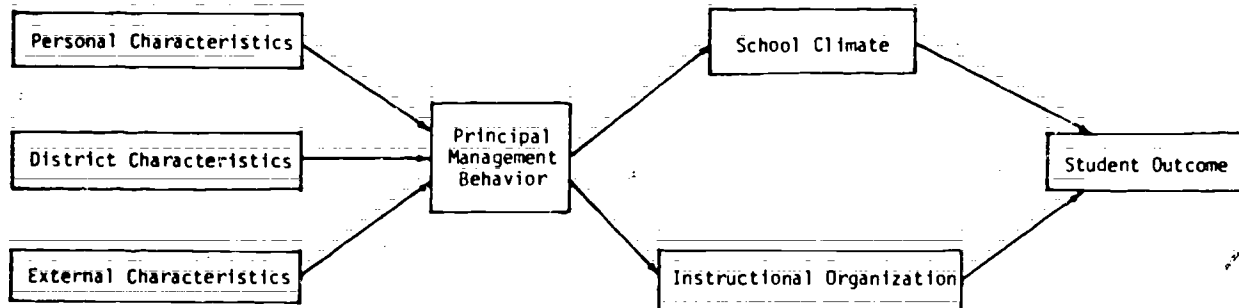
Student Outcome

Figure 1: A Framework for Examining Instructional Management
[From Bossert et al., 1982.]

No single style of management is appropriate for all schools, and principals must find the styles and structures that are best suited to their own situations. They must determine for themselves the relationship between their leadership role and the organization of their school. To undertake this kind of role assessment the principal needs a process or a model that can guide the analysis and ensure that both structure and process variables are taken into account. Such an organizing framework needs to be both comprehensive and flexible so that it allows for differences in schools as well as in individual leadership styles.

One such organizing framework for examining the instructional management role was developed by Bossert et al.[26] This model is depicted in Figure 1 and has been used by elementary and junior high school principals to create an image of their role. It shows that a principal's instructional management behavior affects two basic features of the school's social organization: instructional organization and climate. These are the contexts in which various social relationships are formed which, in turn, shape teachers' behavior and students' experiences that result in student learning. At the same time, the principal's own management behavior is shaped by a number of factors external to the school.

The way this framework has been used with principals and how it can be helpful to practitioners are topics for discussion with Dr. Bossert.

A RESEARCHER'S PERSPECTIVE

FWL: What needs to be done right now to help principals understand their role in helping their schools become more effective?

BOSSERT: I think one important thing is to debunk the myth that there is a single formula for making schools more effective. A sort of corollary to that myth is that principals have to do something innovative, like developing a completely new program of instruction, in order to become effective. Although I think many schools may improve their curriculum and teaching methods, our studies suggest that instructional leadership doesn't necessarily derive from the implementation of a new program. It is based on the principal's ability to respond effectively to the daily activities of the school.

My hunch is that most principals already have the elements for making their schools more effective. What they need are practical, working theories or models that allow them to assess their own actions. They need to know how to put these elements together.

FWL: How do you begin "putting them together"?

BOSSERT: By developing a conception of good instruction and targeting some elements for change. And then, by making sure that decisions support rather than hinder their goals. Let me give you an example: many schools are interested in increasing time on task and engaged time in classrooms. There seems to be evidence that when more students are engaged in successful activities, more learning will take place and achievement scores will go up. On the other hand, sometimes that goal of increasing student time is completely undercut by pull-out programs that aren't well coordinated with classroom instruction or by school-level announcements and assemblies that interrupt lessons. So, in trying to influence potent classroom processes, like time on task, the principal should make sure that other activities within the school don't detract from the targeted objective.

FWL: You have just completed a shadow study of five "successful" elementary school principals. What did you learn about the principal's role?

BOSSERT: Our work suggests some good hunches about what effective principals might do. Our approach has been to try to understand the everyday world of the school principal—their views of what the important instructional factors are and how they try to manipulate aspects of their community, district and school to improve student achievement.

By using techniques of reflective interviewing and shadowing principals, we have been able to build very comprehensive pictures of the way in which principals think and operate as instructional leaders. And because we've taken a collaborative approach, the principals themselves are involved in the model building—trying to abstract from their own behavior what their conceptions are and how they think their actions affect students.

FWL: Do they feel this process helps them?

BOSSERT: Oh, yes. All the principals who participated really enjoyed the process. Principals rarely have an opportunity to reflect on their work day and their own theories. Having a non-threatening pair of eyes following them around for awhile, taking notes and getting a sense of their everyday experiences and then having data reported immediately to them provided a new perspective on their work.

One principal said he thought his model characterized exactly his philosophy and the way he worked in the school, and that if he were going to apply for a new job, he would show this profile to the superintendent and say, "This is the way I work in schools."

FWL: What do these models that you and the principals generated look like?

BOSSERT: We used an organizing framework to help us make sure that we gathered information on a variety of items. [Figure 1] But the principals shared in the development of their individual models, and although they look similar, the contents of the boxes are quite different for each principal. That's what we expected. Since there's no single formula for being an effective principal, the context will shape the ways in which principals can act and the things they try to act on.

Another interesting thing is that some of the principals also saw a definite time sequence in their efforts. For example, one principal worked first on important climate factors because he thought these would motivate students to learn. Then, as he increased motivation, he tried to influence the way in which instruction was delivered. But not all of the principals worked in this way. [Figure 2]

FWL: What you're saying reinforces the notion that the observer and the principal need to look at all the principal's actions and all aspects of the school context in order to develop an accurate image of the principal's role in that school.

BOSSERT: Right. What we had to do was to observe principals over time and get them to reflect on their current and past situations. Only then could we understand better how principals them- selves conceive of the interrelationships between instructional organization and climate and how other factors, like district characteristics, community characteristics, and their own personal training, shape the effects that they can have on climate and the curriculum. This also reflects the fact that the princi- pals we observed always had multiple strategies for improving student learning and understood the necessary connections among all aspects of their schools' organization.

FWL: Is this a process that can be used with other principals--to help them develop an image or a model of their role?

BOSSERT: Well, we're doing it now. We're working in twelve schools this year and in addition to looking at the principal's role, we are interviewing teachers and students to find out if their perceptions match what the principal thinks he or she is doing. This way we'll get a much more detailed model of the school as a social organization and see how the principal's goals either mesh or don't mesh with the teachers' and how some of the principal's ideas get translated either correctly or incorrectly into programs that affect students.

FWL: Will you develop any procedures or materials that could help principals do this modeling on their own--or with other principals?

BOSSERT: Yes, we hope that by next year we will move more into the development activities. One goal that we have is to streamline our techniques for shadowing and reflective interviewing so that prin- cipals themselves can use some of these to guide their own self-assessment. Or we may develop a workbook for peer assessment where one principal could shadow and inter- view another principal. We'd like to work with several districts to pilot test these ideas.

The principalship is often described as an isolated role, and principals complain that they don't have a chance to observe each other. So our goal is to present some very detailed studies of principals who operate in different contexts so that other principals can get an idea of what their colleagues are doing, and to point out the variety of strategies that might be helpful.

To that end we will be conducting a regional survey of creative instructional management practices in which, through a nomination process, principals who are doing some very creative or innovative instructional leadership activities will be described and highlighted. And other principals will be able to contact them and find out more about their programs and get some advice or assistance.

COMMUNITY CONTEXT

a. Low SES
b. Transient population
c. Declining economy

PRINCIPAL CHARACTERISTICS

Experience: 22 yrs.
Training: M.A. in reading instruct.
Beliefs: Democratic Egalitarian

INSTITUTIONAL CONTEXT

a. Centralization effort from district
b. State and Federal programmatic and funding regulations

PRINCIPAL'S SCHOOL PLAN

5-yr. plan to:
a. Raise test scores
b. Decrease student violence
c. Improve facilities

PRINCIPAL'S MANAGEMENT BEHAVIOR

Mode: Facilitative & Catalytic

Activities:
a. Staffing
b. Communicating
c. Monitoring

SCHOOL CLIMATE

(factors affecting student readiness for learning)

a. Physical plant
b. Safety
c. Staff cooperation
d. Student compatibility
e. Staff interest in whole child
f. School-community relations

t_1

STUDENT OUTCOMES

a. self reliance
b. productive citizenry
c. minimum competency communication and computation skills
d. achievement commensurate with ability

INSTRUCTIONAL ORGANIZATION

a. Language development Kindergarten
b. Multi-approach reading prog.
c. Child-centered instruction
d. 3 R Emphasis at all levels
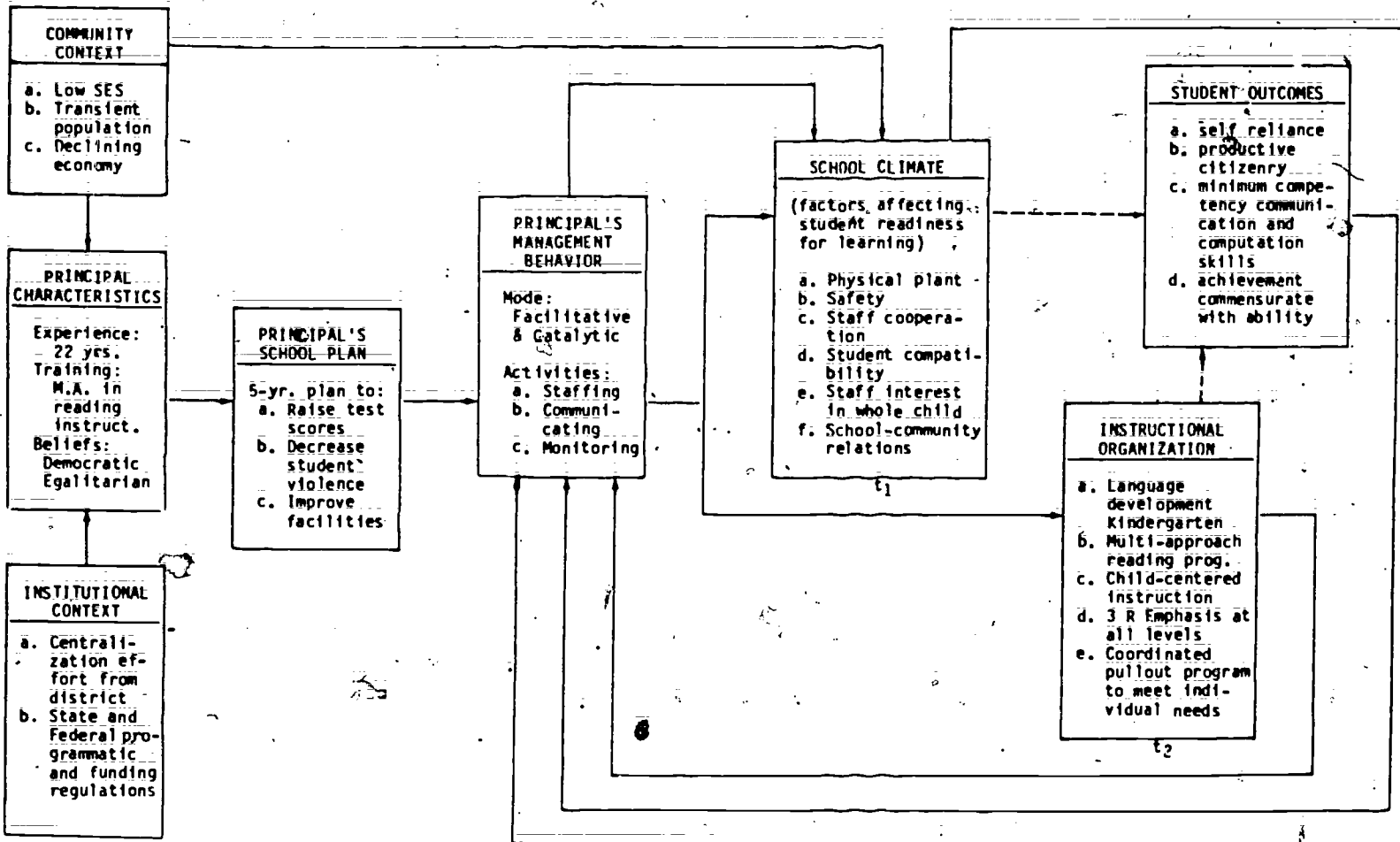e. Coordinated pullout program to meet individual needs

t_2

Figure 2: Instructional Management Model - Jeffrey Hudson, McDuffy Elementary School
[From Dwyer et al., "Five Principals in Action: Perspectives
on Instructional Management." Far West Laboratory, 1983]

Note: t_1 indicates factors addressed first; t_2 indicates factors subsequently addressed.

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FWL: In your studies were there any characteristics that all the principals you worked with had in common?

BOSSERT: There are two aspects of the principal's role that I could mention. One is being very active and attuned to the cycles of the school. All these principals were systematic about getting around the school each day so they had a chance to observe, however briefly, all aspects of the school's functioning. One principal carried a little matrix on a 3x5 card, and he'd check off his matrix as he went along as a guarantee that he visited all the different subsettings within his school. We think this is very important for principals because it gives them a chance to assess how well their school is running and to catch in the bud any potential problems. These principals did not stay in their offices but were constantly interacting with teachers and students.

The other factor that distinguishes these principals is that each one has his or her own theory about instruction and the way in which leadership actions affect instruction. So as they went through the schools and had all these brief encounters, they seemed to be always checking their actions against their idea of what constituted an effective school and effective instruction. In other words, they diun't seem to make arbitrary decisions. Their decisions could always be definitively linked back to a conception of what makes good instruction or good schooling practices.

FWL: What is the biggest challenge for effective schools research right now?

BOSSERT: I think that the biggest challenge for research is to generate what we would call multi-dimensional, multi-level models of effective schools. In addition to improving basic skills achievement, there are other goals that principals are working toward, and these goals often involve tradeoffs in resource allocation. The decisions that principals make about goals, time and resources are influenced by the district policies, Federal and state regulations, community attitudes and teachers' differences, and we don't know how the controls and practices at any level of the school organization hinder or facilitate a principal's making his or her school more effective. So we need to have these multilevel and multi-dimensional models.

FWL: If you were hiring a principal, what characteristics would you look for?

BOSSERT: Besides successful teaching experience, the general characteristic I'd look for in a principal would be an interest in inquiring about what makes an effective school. I would want someone who not only has the desire and ability to try things out but also would follow up those attempts with systematic assessments of what they have done--someone who really wants to inquire into the workings of their school. I think that kind of person becomes the principal who will make an effective school.

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The Improvement Support Program at Far West Laboratory provides a variety of educational services to educators in Northern California, Utah, and Nevada including research information, technical assistance, and staff development.

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