This synthesis of research findings translates investigations in instructional leadership into a working model for practitioners—principals, assistant principals, teachers, and others. Three kinds of research—theoretical, practical, and ethnographic—are used to develop a model based on six interrelated functions of instructional leadership, covered in six chapters. The first of these is setting academic goals, and this involves communicating a vision of success and developing a plan of action. Chapter 2 addresses the task of organizing the instructional program. Included is a discussion of managing the school as a loosely coupled system, a section on curriculum management, and an outline of organizational strategies. Chapter 3 discusses the hiring, supervision, and evaluation of teachers. Chapter 4 provides strategies for protecting instructional time and programs, and chapter 5 discusses the importance of maintaining high expectations to establish a climate for learning. Chapter 6 is devoted to monitoring achievement levels and evaluating programs. Instead of the more common "engineering" model of evaluation (based on input/output analysis), a "medical" model is proposed, based on assessing a wider range of characteristics and looking at unintended as well as intended outcomes. A 7-page bibliography lists 71 references. (TE)
Instructional Leadership:
A Composite Working Model

Synthesis of Literature

by James R. Weber

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Prepared for the
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by the
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Foreword

The ERIC Clearinghouse on Educational Management at the University of Oregon and the North Central Regional Laboratory at Elmhurst, Illinois, are pleased to offer this publication, part of a series of syntheses papers and annotated bibliographies on themes related to instructional leadership and school improvement. The Clearinghouse wrote and edited the materials under a sub-contract for the North Central Laboratory. Both agencies are now making the publications available to their respective clienteles.

The titles of all the publications in this series are as follows:

Synthesis Papers
Instructional Leadership: A Composite Working Model
Teacher Evaluation as a Strategy for Improving Instruction
From Isolation to Collaboration: Improving the Work Environment of Teaching

Annotated Bibliographies
Models of Instructional Leadership
Teacher Evaluation
The Social and Organizational Context of Teaching

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Besides processing documents and journal articles, the Clearinghouse prepares bibliographies, literature reviews, monographs, and other interpretive research studies on topics in its educational area.
Introduction

This synthesis of research findings translates investigations in instructional leadership into a working model for practitioners—principals, assistant principals, teachers, and others—to read and discuss. By working model is meant a cluster of areas of concern in instructional leadership that can also be discussed as specific behaviors, that is, as a leader’s responses to real situations in real schools.

Much of the research literature on instructional leadership comes from three different approaches in method: (1) general overviews of leadership areas, (2) specific suggestions for changing one or another area (supervision, school organization, or curriculum development, for instance), and (3) analyses of principals’ approaches on the job compiled by following principals through their workdays. These kinds of research, which could be termed theoretical, practical, and ethnographic, all contribute something to our understanding of instructional leadership.

At first, there may be some confusion about what instructional leadership covers. Other phrases express much the same idea: "instructional management," for instance, or "instructional supervision." Instructional leadership is treated here as the most general term, one that includes both management and supervision functions, and more besides. Beyond the direct contact with teachers (supervision) and the control of support services for instruction (management), leadership duties include some overarching concerns such as defining school goals, setting standards, and influencing the learning climate. It includes both the tone and the substance of a leader’s relationship with faculty, students, and the community.

The research on successful schools—those that maintain high achievement levels, perhaps with modest resources—has related leadership and school achievement very positively. In so doing, studies have recognized the two dimensions of leaders’ roles—managing the school as an organization and exerting important personal influences on their schools. In fact, the principals of various successful schools may differ remarkably in their strengths, some being better managers and others being more personally influential leaders, perhaps less given to planning but more able to smooth over difficulties when they arise. Principals tend to define their roles differently, as well, depending on the environment in which they operate. Some are problem-solvers, other strategic planners, and still others diplomats.
Headship and Leadership

In the research literature on leadership, which has grown steadily since the early fifties, a distinction is made between leadership and "headship." Headship is said to consist of managerial duties done by someone appointed, with little or no collaborative input needed and with no contribution required to a group process. In other words, the head's job is relatively isolated; his or her decisions are relatively unaffected by interests or predispositions other than his own.

Leadership, on the other hand, is described as power granted with the will of the followers. It is authority readily invested in a trusted person and thus qualifies as a kind of moral and transformational power over the organization. This is a polarized theory of leadership, of course, and no doubt oversimplified: no one is completely a "leader" or completely a "head." But it points out two major facts about the effective principals studied in research on educational leadership.

First, the instructional leaders are listeners as well as talkers; they are collaborators with teachers and students, whose needs present the most important demands in an instructional leader's role. The leadership process, then, is interpersonal and dynamic. Second, the leaders--particularly when they are also principals--are finally accountable for the whole instructional program. They are "headmasters" or "headmistresses" of the faculty. The buck stops with them. So, effective principals do not hesitate to call the shots when decisiveness is needed.

In actual practice, being able to control every area of instructional leadership is probably impossible. It is also an unrealistic view of the nature of leadership, as the research also shows. In fact, successful instructional leaders tend to delegate or share duties when excellent and responsible people are available and when time constraints make it impossible for leaders to do everything equally well. In schools, the distance between classrooms and the office--both psychologically and physically--often tends to "neutralize" a principal's best-laid-plans, in any case. The successful principal, it has been found, tends to accept this situation and work around it by appealing to teachers' sense of pride and independence, communicating school goals, making a strong commitment to staff development, and recruiting faculty to serve in some capacities as instructional leaders themselves.

A Synthetic Model of Instructional Leadership

Given this research background, two assumptions underlie the following model: (1) the principal is the prime instructional leader and (2) the principal works with leadership functions that
are sometimes shared and sometimes not shared, either *de facto* or intentionally.

Although many individual functions can be related to instructional leadership, for the sake of economy this approach contains six. All are interactive—that is, they all affect one another and are pried apart here only for the sake of discussion. Other categories can certainly be added and probably will be by the principals and others who read and discuss this information.

In fact, it is best to think of this synthetic model as a seed for growing ideas. Depending on where the seed is planted—in various schools or particular experiences of individual principals or teachers—the outcome will be slightly different. One part may seem stronger and more resonant to one person than to another; parts can be strengthened or clarified with personal experiences. It is recommended, therefore, that this model be the seed for discussion. Talking about leadership should probably be as much a social process as leadership itself.

The accompanying diagram shows the six functions discussed below and illustrates their interconnectedness. In each of the chapters that follow, a short discussion of research findings on the particular leadership function at issue is followed by questions or behavior inventories that focus the research on specific practices.

This model has been extrapolated from other general models and from research studies dealing with the various subareas of instructional leadership. Models of instructional leadership have tended to be quite general, particularly before the popularity of the ethnographic studies of the last few years. This is not surprising: models are static and the process of leading is dynamic, presenting ever-fresh problems to leaders (or perhaps new versions of old problems).

The strength of leadership models, however, lies in identifying the sorts of issues confronting leaders, their range of responses, and the objective sets of behaviors that successful leaders regularly display. K. A. Leithwood and D. J. Montgomery (1982), for instance, are two researchers who divide their observations of leadership elements into factors affecting students' classroom experiences, factors affecting students' nonclassroom experiences, and other relevant general areas, such as goal-setting, resource-allocation, and reaching a staff consensus on goals.

Other researchers, such as Joseph F. Murphy and others (1983), have codified instructional leadership in more detailed and schematic ways. Murphy and his colleagues divide instructional leadership into a conceptual framework of three parts: (1) the activities of leadership, including behaviors, practices, and
Interrelationships among Six Major Functions of Instructional Leadership

- Maximizing effects of instructional organization
- Setting school academic goals
- Monitoring achievement levels/evaluating programs
- Setting standards for achievement/setting tone for learning climate
- Hiring, supervising, evaluating teachers
- Protecting instructional time and programs
policies; (2) its processes or general skills, such as communication, conflict resolution, and decision making; and (3) ten functional areas, similar to the six that follow in this model, that make a school more effective.

Still other models have looked at the environment of leadership. That of Steven T. Bossert and others (1982), for instance, shows the principal's management behaviors as the result of personal factors, school district relationships and policies, and community characteristics. The principal's management style, in turn, affects the school climate and instructional organization before it influences student "outcomes." All these models contain valuable insights into the structure of leadership in schools. The synthetic model presented here draws on them, as well as on other area-specific research.
Chapter 1

Setting Academic Goals

Defining school goals is a process of balancing clear academic ideals with community and internal school needs. Perhaps initially, though, it is a matter of keeping current with those needs. The general goals of the school vary over time. The specific program objectives also may change in response to achievement indicators, such as standardized tests; and individual classroom objectives may shift as teachers conform to program or departmental objectives.

A leader provides the guidance and central themes for this orchestration of goals, from the unit objectives to the general understanding of a school's philosophy. Such guidance requires, of course, that the instructional leader be familiar with all levels of instruction in the school, much as a conductor knows the qualities of each instrument in an orchestra. Like the conductor, the instructional leader must work with individuals of varying capacities and an established score (composed by the public and by various government agencies). In their jobs, instructional leaders may be less applauded than conductors, but nonetheless need as much finesse and knowledge.

Visions for Success

In a study of five California schools, David Dwyer and his colleagues (1983) found that principals must coordinate goals on multiple levels—school, program, class, and unit. They also discovered, however, that the successful principals were all committed to their own particular vision of a successful school. Then, instead of forgetting their hopes in the midst of everyday concerns, these principals seemed to be resolute in communicating their visions and working through a school's strengths to improve student achievement. The principals Dwyer's team studied "had a working theory that guided their actions," he comments. "They all sought to understand how modifications in the structures of their schools influenced youngsters." Indeed, all the subjects in the study thought of themselves as the pivotal points around which the disparate pieces of the school turned.

The metaphors for leadership that arise from these researchers' conclusions suggest that we may be on the track of an essential but elusive element in the psychology of leadership: the intentions that drive successful leaders. Leaders, as Dwyer and his colleagues suggest, see themselves as pivotal points. They are the leaven in the loaf, the catalysts, the strong guiding hands, the chiefs among others in their tribes.
Arthur Blumberg and William Greenfield (1980) queried eight principals about what they wanted from their schools. Like Dwyer's team, these researchers remark on the diversity of opinion and the common strength of the visions in the principals' general goals for their schools, as reflected in the following samples:

**Principal 1:** What I don't want it to be is a single-minded approach. I don't want it to be an open school or a traditional school, or a school without walls, or a math school or a science school... I want to be able to accommodate the different learning styles of different kids and teachers, the different strengths of different teachers. I think if we have that rare person who is an excellent lecturer, I say let that person lecture, and in fact, encourage that person to lecture... capitalize on those strengths.

**Principal 2:** I figure if the staff gets educated, and gets exposed to new ideas, they'll transmit them to kids. ..and I found it very frustrating in the beginning to realize where they were, because I kept thinking they were here, and I'd get more data and find out they were even further back than that... They're flying by the seat of their pants. They don't know what they're doing, they don't know why they're doing it. They're doing the wrong thing up in their own classroom, and I don't think that's okay. I think they need to know why they're doing what they're doing. Maybe they won't change a thing... but at least if they know... what purpose it has to the total picture, then that's okay.

**Principal 3:** When I went in there. . .I think the essential thing was to make calm out of chaos... For the most part we were successful in turning around the education program... in terms of scholastic achievement. Each year we took an increasingly larger number of students who were already academically troubled in reading and basic skills... and we instituted programs to deal with this crisis... but I always felt that we were not getting them to achieve... We had too many kids graduating with "D" averages, just barely minimum, and that was the failure that I saw from my standpoint.

Although these principals do not have visions of the school that are labelled "A Theory of School Improvement," it is easy to see that they nonetheless are able to see how they would like the school to look when the gaps are filled and the failings are remedied.
Plans for Action

But the successful leaders apparently do not stop with envisioning what they want from the school. They also actively attempt to actualize their vision. According to Blumberg and Greenfield, "it was this personal commitment to a particular educational or organizational ideal, and their willingness to articulate and work for what they believed in and felt was vital to the success of the students and teachers in their schools, that distinguish [successful principals] from many of their administrative peers."

Perhaps because they have educational ideals, these principals are able to focus on student achievement and teacher performance above the institutional pressures (and perhaps the community pressures) that favor mediocrity. Furthermore, acting on their ideals for the school probably prevents them from getting bogged down in administrative trivia—"administrivia." They tend to share the paperwork with other administrators so that they can find more time for instructional leadership initiative.

The study by Dwyer and associates pays close attention to this interplay of vision and practical action in successful principals. One principal in this study, for instance, holds an educational philosophy that sees the school as a caring place, but he strives to translate the caring into achievement by directing it to the quality of teaching. All teachers are required to set nine-week, achievement-based objectives for their students, meeting the district requirements for yearly achievement. He observes teachers in action, setting aside most mornings specifically for classroom visits. He reviews teachers' lesson plans and objectives regularly, and follows student progress on daily work and standardized tests. He holds teacher conferences at least eight times per year, using the information he gains to structure the staff development program. He demonstrates caring about the academic problems of students by getting to know them personally—being visible in the school and holding weekly whole-faculty meetings in the school auditorium. Thus, his philosophy of caring takes on form in tight control and active involvement in instruction.

The presence of a guiding personal vision of school improvement or a personal theory of education allows us to detect commonalities in leadership approaches that otherwise reflect only distinct differences in style. Of the five principals in the Dwyer team's study, two of them reflect stylistic differences that could hardly be wider. One elementary school principal admits to being "not very philosophical," and the researchers term his style of management "idiosyncratic." Despite a stern discipline policy, for instance, he readily makes exceptions on the merits of individual cases. "He often ignores his own rules," the researchers report, "simply because he likes a student and is forgiving."
Although standardized curriculum has been his major focus as an instructional leader, he leaves the choices of particular textbooks up to teachers. Rather than leading by intervening in classroom activities, he leads by maintaining discipline and being a liaison with the community. His vision of a good school seems to involve allowing nothing to interfere with a student's or a teacher's sense of self-respect and fairness.

Another principal--of a junior high school--is described as "logical, rational, and highly goal-oriented." He directs the school through four distinct roles: as information processor, interventionist, monitor, and change initiator. He monitors students' performances on standardized tests and in classrooms, collecting additional data on how well the prescribed district curriculum is being implemented. He evaluates teachers systematically and personally attends to scheduling and staffing concerns. Both principals are described by teachers and parents as being excellent instructional leaders.

The style of one principal depends more on personal influence; the style of the other on specifying intermediate objectives and overall coordination. These differences may certainly stem from personal traits; either person, in other managerial circumstances, might display the same qualities. But these principals share the quality of having both a theory and a plan for their schools. The elementary principal thinks of the school as a whole when making plans for instruction. He has a Principal's Program, a long-range plan that he develops through a personal style and flexible short-range goals. The plan seems to keep him directed in the midst of surrounding distractions:

I used last year to zero in on student behavior and developed the school's discipline policy. This year I'm zeroing in on parents. . .Parent support develops money; money then allows you to take care of the physical appearance of the school....With student behavior being maintained at close to excellent levels....with the plant being taken care of this year, the next area of need that I see is to refurbish the textbooks and see to it that the teachers have the materials they need to teach.

The junior high principal also has a working theory that guides his approach, one emphasizing raising individual student achievement levels and teacher performance. He sees his role as the facilitator and reviewer of curriculum: "It's important to be in curriculum, an instruction person in this district." He has a direction that enables him to combine a charismatic personal style with clear instructional goals.
Examples of a Statement of Purpose and a School Achievement Plan

Every principal probably sees needs that must be met in his or her school—the physical plant, discipline, morale, textbooks, funding for laboratory or vocational equipment. How they prioritize these needs is an important part of school improvement—and of their vision of the school’s mission or ideal condition. It may be helpful to see an example of a formal statement of educational purpose that can be used in any school. Displayed in Table 1, the statement was created by Wilbur D. Brookover and his associates (1982) for an inservice program called *Creating Effective Schools*. Although general in its goals, the statement cites two levels of purpose that are appropriate to the working theories held by instructional leaders.

Table 1
Suggested Statement of Purpose and Beliefs

| A. The purpose of the school is to educate all students to high levels of academic performance. |
| B. To fulfill this purpose, the members of this school staff believe: |
| 1. All students should have a challenging academic program. |
| 2. All students should master their grade level objectives. |
| 3. Teachers are obligated to prepare all students to perform at mastery level on the objectives for the grade. |
| 4. Parents should understand the academic goals of the school and support their child and the teacher’s efforts to reach those goals. |

Source: Brookover and others (1982)

Because a statement of mission means little without a plan to bring it into reality, a school achievement plan can make the statement of purpose and beliefs more specific. What do we mean, for instance, that all students should have a "challenging academic program"? Or what do teachers do to "prepare all students to perform at mastery level on the objectives"? Obviously, the terms used in the statement of purpose should be those recognized by the faculty and administrators of a school—not simply something imported for the sake of sounding good.

Once a statement of beliefs is circulated and discussed, it may generate a surprising number of diverse opinions. If left to a committee or a consensus to finish it, it may never be completed. The school, therefore, should take it as a personal project.
to crystallize the mission of the school. It can, after all, be used best to set the tone in the school. A school achievement plan, on the other hand, is a practical guide for teachers to form their instruction around, as the example in table 2 (also taken from Brooker and others and matching the above statement of purpose) shows.

### Table 2

**Suggested School Achievement Plan**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Learning objectives to be mastered will be identified for each grade level.</td>
</tr>
<tr>
<td>B</td>
<td>A standard for mastery performance for the school will be set by the staff each year and explained to students and parents.</td>
</tr>
<tr>
<td>C</td>
<td>Formal assessment of academic progress for all students will be conducted as follows:</td>
</tr>
<tr>
<td></td>
<td>1. Pretest at the beginning of the course.</td>
</tr>
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<td></td>
<td>2. Quarterly tests.</td>
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<td></td>
<td>3. Posttest at the end of the course.</td>
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<tr>
<td>D</td>
<td>Progress reports will be sent to parents following each formal assessment of student learning.</td>
</tr>
<tr>
<td>E</td>
<td>The teacher will certify at the end of the course that each student has or has not achieved according to the established standard for mastery. A copy of the certification will be sent to each student's parents or guardians.</td>
</tr>
<tr>
<td>F</td>
<td>To meet the school standard for mastery, it is expected that</td>
</tr>
<tr>
<td></td>
<td>1. Teachers will organize and conduct instruction so that mastery performance is possible for all students.</td>
</tr>
<tr>
<td></td>
<td>2. Students will exert whatever effort is necessary to learn their objectives.</td>
</tr>
<tr>
<td></td>
<td>3. Parents will support and assist their child's efforts to learn the objectives of the grade.</td>
</tr>
</tbody>
</table>

**Source:** Brookover and others (1982)
Chapter 2

Organizing the Instructional Program

Closely aligned with making instructional goals for the school, the strategies for bringing the goals to reality depend on allocating staff and organizing curriculum to maximum effect. Instructional organization includes student groupings, teacher organization, leadership teams, and the structure of the curriculum. In effect, the policies affecting organization of instruction involve matching teachers, students, and courses for the best outcomes. But much appears to depend on the makeup of instructional leadership. The degree of centralization in leadership seems to have a marked effect on whether schools foster team teaching, for instance, or on how decisions regarding curriculum are made.

Management of the School's Loose Couplings

In the background of most recent studies of instructional leadership is a theory of how organizations—particularly schools—are arranged. Karl Weick (1982), a professor of psychology at Cornell, argues that schools are "loosely coupled" organizations, that is, they have relatively little inspection and evaluation of workers as well as comparatively general—even indeterminate—goals. Workers in schools, as opposed to those in factories, are loosely bonded to one another because few people are involved in every area of school life. Hence, there is a loose relationship between decisions made at the top and their implementation among the teachers, who are autonomous workers. In other words, schools are not organized as businesses and thus cannot be led like businesses. The "effective executive" books of the 1980s, then, don't quite fit the leadership realities of the schools. Lee Iacocca does not have the same realities to face as the principal of Monroe Junior High School.

Besides not pulling down a CEO's wages, the principal of Monroe Junior High is not dealing with a clear input-output economy nor with clear indicators of success. In business, the success rate is clearly indicated in sales. Workers' autonomy can be closely and effectively regulated to increase efficiency. But in schools, the relationships among people are less predictable and the outcomes are a little less (perhaps considerably less) measurable.

Premium on Persuasion

Communication is different in schools, as well. School administrators, Weick has found, must rely less than business people on diffusion and networking to spread information among workers. Teachers may find it harder than factory or office
workers to learn from mistakes because the feedback about the effects of their work is more delayed and more mixed with other information. Also, school administrators may find that their decisions affect only a small number of people directly, so that change comes more slowly than in business.

Unlike managers in business, Weick says, "the administrator has to start projects earlier, start more projects, start projects in a greater variety of places, talk more frequently about those projects that have been started, and articulate a general direction in terms of which individual members of the system can make their own improvisations." School administrators are thus more likely to use multiple criteria to gauge whether the organization is being effective. Few principals, for instance, appear willing to claim that achievement scores are the only (or even the final) criterion in a successful program.

School leaders, after all, have a large constituency who have independent views of how they will be satisfied. School leaders probably spend more effort than their business counterparts in persuasion in order to get a job done. Even if the leader is a good one, teachers will share their leader’s vision on goals—and relatively little else. Whereas in more tightly coupled organizations people share a common sense of direction, such direction has to be built and maintained in schools.

Consistently communicated goals are probably the most important glue to hold loosely coupled groups together because everyone needs goals to work toward. But, Weick adds, administrators should also pay close attention to the instructional issues that teachers agree on. These issues allow people in the school to coordinate their actions despite the autonomy and differences of technique. When people see the same problems in the same way, there is often less need for surveillance or disappointment.

Need for Collaborative Planning

Charisma alone or the latest dynamic management ideas are not enough, then, to make a school’s organizational structure contribute the most that it can to the instructional program. Methods of instructional organization that work depend on collaborative planning between instructional leaders, teachers, and parents. Certainly, the decision to place a student in one or another classroom, study group, or program is a decision that involves teachers, administrators (who may oversee staffing and scheduling), and the parents. Thus, among the essential effective behaviors that most researchers list is that principals collaborate with staff in planning and grouping for instruction.

The effect of school organization on outcomes is not clear in the research. The research team at the Far West Laboratory (Dwyer
and others 1983), for instance, were less certain about the five successful principals’ use of organizational groupings after their study than they were before. Their investigation showed principals thinking about and changing class sizes, schedules (affecting instructional time), and staff assignments. But as might be predicted for loosely coupled organizations, their interventions in these areas differed greatly from one school to another. The best answer to the problems of instructional organization may be to know the teachers and students affected by grouping and scheduling: to know teachers’ beliefs about educational issues, their openness and ability to team with others; to know students’ emotional and academic needs, and their potentials.

Schools may differ subtly in what is allowed, what is tolerated, or what is encouraged in instruction. There may be a tradition or an instructional climate that maintains certain expectations about what teachers can (and will) do. Some faculties, as researchers Tom Bird and Judith Warren Little (1985) observed, resist organizational innovations such as teacher teams or unfamiliar theories of student grouping. Some faculties may be reluctant to be frequently observed or ever evaluated. Other faculties may be divided on an instructional/organizational issue. For instance, the support of some faculty members for multiage grouping in an elementary school allowed Roland Barth (1980), the principal, to try that method in some classes. If no faculty or parents supported the idea, he admits, he would either have had to argue very persuasively for it or do without.

Curriculum Management

Curriculum management, along with staff development, has been said to be one of the two major domains of instructional leadership. In theory, curriculum management is part of the job descriptions of superintendents and principals, as well as a role assumed to be undertaken by teachers. It is often the major duty of one special district administrator—the assistant superintendent for curriculum and instruction.

Although curriculum development may be accounted for at the district level by a special position, it must compete with many other demands at the school and classroom levels. Indeed, at those levels there is often a gap in curriculum leadership. The standard process in most districts is for content-area committees of teachers and administrators to produce curriculum guides for departments or grade levels. This process may begin over a summer, with participants paid extra for their time. Then the guides are distributed to the district’s teachers. Finally, inservice sessions help teachers use the guides. This district-wide ideal curriculum must then be translated from the abstract to the particular teaching content of individual schools and classrooms.
Most principals find it difficult to fit in the planning, needs assessment, implementation, and review needed in a formal approach to translating district curriculum guides. An analysis of one district's principals shows them doing the best they can under severe time constraints. In a survey of twenty-four principals in the Scarborough, Ontario, school district reported by Elaine Minsky and others (1984), 63 percent of principals said that lack of time was their major barrier in effectively implementing the district curriculum. Fifty percent complained of the "broadness" of the task. But time problems accounted for the most trouble in managing curriculum development. Only 38 percent had time regularly, once a month during the school day, for implementation activities. Others were able to fit it in as follows:

- once or twice a term during the school day: 8 percent
- "as needed" during the school day (irregularly): 38 percent
- seldom during the school day: 13 percent
- never: 4 percent

Under these conditions, what sort of supervision were these principals able to manage? Six out of ten said they had no systematic, ongoing process of curriculum implementation. Because of the time problems and size of the job, most (55 percent) relied on an eclectic, largely informal approach to implementing curriculum strategies in the classrooms. Those methods included discussions in the staff room, visits to classrooms by the principal, provision of resource people for teachers, demonstrations of teaching by the principal, and (occasionally) explanations of overall goals or teaching philosophies. Thus, principals may do by devoting small portions of time and energy to curriculum implementation rather than a formal effort.

Methods such as these do provide some evidence of a principal's interest and support in changing the curriculum. There are, however, more systematic ways to facilitate the planning and implementation of curriculum innovations. Although systematic procedures for coordinating and aligning curriculum may not require that a principal exercise direct control over how teachers use the new materials, they do require changing people's work habits. Thus, cooperation and quiet pressure accompany more overt forms of persuasion, as well. The following discussion of opportunities for curriculum supervision draws on a wide range of strategies through which a principal can wield influence.

Supervising Budgets and Schedules

Determining what and how to purchase materials may be the principal's greatest opportunity to influence the directions of
the curriculum. Rather than allowing each teacher in a department to spend money on his or her own initiative, the principal could require that the money be budgeted as a total-department decision. This procedure forces all teachers to participate in the budgeting discussions for fear of being left out. It may also result in multiyear spending plans as departments must assign priorities on the basis of present and future needs. Buildingwide committees could also discuss budgets for the school as a whole with much the same results—wide participation in decision-making and multiyear plans (Bruce Kienapfel 1984).

Like control over money, control over time is a potent influence in supervising the curriculum. Time available for instruction can have a major impact on learning. Furthermore, the time available for teacher inservices and other staff development activities affects teachers' skills and attitudes toward their work (William A. Firestone and Bruce A. Wilson 1985). Principals can also shift experienced teachers from honors courses to lower-skill courses, thus providing the best teaching in areas of the greatest need. When the principal has a say over scheduling, the distribution of levels of classes over members of a department can be more equitable. Teaching remedial classes may even become a sort of status symbol—a mark of a teacher's having "arrived" (Kienapfel 1984).

Involving Teachers in Curriculum Planning

It has been found that teachers' foremost desire is to maintain control over their classroom context, particularly the selection of teaching materials. They also want a role in curriculum decisions affecting the whole department or school, but they do not want responsibility for final decisions in the larger context. Instead, they would prefer to participate as a group with the principal, who decides matters not central to their classroom interactions with students (John A. Ross 1981).

Teachers are but one of several groups that seek to influence curriculum planning; consequently, their participation needs to be seen in the light of other pressures on this planning process. Instructional leaders can engage interested parties in curriculum planning by informing them about options and finding common ground among their interests, as Glenys G. Unruh (1983) explains:

Curriculum leadership can be measured by the degree of competence shown in acquainting the participating groups and individuals with the best that is known from related research and employing a range of organizational skills including: identifying needs and problems by unbiased methods, defining goals and objectives at several levels of decision making, developing plans and procedures that elicit the trust and cooperation of the participants,
involving people of different as well as like interests and backgrounds, finding ways to communicate and use feedback from inside the school and with external groups, and using implementation and evaluation processes that will produce continuing and constructive change and renewal.

This same advice, which was directed to coordinating the efforts of numerous interest groups outside the school, can be applied to interest groups within the school, too. A faculty that divides into groups based on the different philosophies and styles of its members needs direction toward common goals. Creating common goals and a common language to talk about curriculum will, in themselves, raise teachers' participation in planning and implementation.

Supporting Teachers during Curriculum Change

When new curricula are implemented, teachers look for the support of their principals perhaps more than other instructional leaders. A supportive principal is one who is involved in all phases of curriculum implementation and concerned with instructional development. As one teacher has put it, "I want the principal to work with me-I'm not working for him" (KUOW FM 1987). When teachers perceive principals as working with them, the entire climate of curriculum implementation is improved: the staff feels more cohesive, expresses more satisfaction with the curriculum innovations, and interacts more with one another in making and supporting decisions (Laurie Brady 1985).

Some kinds of support are needed in advance of implementing curriculum. Initially teachers must be supplied with the needed materials and equipment. "Nothing slows down an implementation effort more surely than late-arriving materials, or requirements to share beyond what is practical," say Susan F. Loucks-Horsley and Ann Lieberman (1983). Human support, too, is needed--in fact, it may be crucial in the early stages of curriculum change. Principals can remind teachers that the new curriculum is a school priority, offer encouragement, and express interest. Principals can also delay introducing additional new curricula or programs during the first two years of one curriculum implementation. Too often, schools overload teachers with innovations, siphoning energy that might be sufficient to make only one program succeed.

In the planning and operational stages of curriculum change, teachers must be allotted the time to prepare, adapt materials, receive training, solve problems, and receive and give support to other teachers (Loucks-Horsley and Lieberman 1983). Because it takes three to five years to integrate curriculum change into a school, ample time must be given to overall implementation. No one can say a program has or hasn't worked until it's been given a
full measure of time. Released time for teachers, too, is necessary because time spent during the school day is usually more productive than afterschool time when teachers are tired.

More than the principal's support is needed, of course. Peers supply the added insights and comradeship that are important when the content of teachers's work must change. Principals can make special efforts to get teachers together regularly and informally to discuss the new curriculum, particularly when the curriculum has been used for a time and teachers are more aware of possible improvements (Loucks-Horsley and Lieberman 1983).

Like peer support, exposure to research studies widens a teacher's perspective on a new curriculum to include the experiences of other schools and teachers. Teachers can be provided access to relevant research through articles circulated through the faculty or can find studies themselves through ERIC or the National Diffusion Network. Outside consultants, too, can provide a wider view of the new curriculum and can help teachers to overcome problems or crystallize revisions.

Linking Curriculum Development with Staff Development

One of the major problems in introducing curriculum innovations is the resistance of faculty. Innovations upset established, sometimes hard-won ways of teaching. They may also elbow aside curricula that are relatively inflexible. A math program, for instance, may be proposed that uses a unique approach to "mapping" strategies to explain elementary functions; mixing this new approach with the old would be unworkable.

The resistance is understandable, particularly if teachers think that a curriculum change is being forced on them. Thus, two adaptations have to take place: the teachers must adapt to the curriculum, and the curriculum must be adapted by teachers who are using it. Successful implementation means developing both the new content and teachers' understanding of it.

Professional development progresses through several stages in implementing changes. The early phase is self-oriented, as teachers are concerned with their ability to communicate the new materials and what they will have to do differently. Then, once their fears are allayed, teachers become more aware of the new materials and begin to critique their preparation time, organization (Why does this come before that?), and economy of explanation (Why do they make it so complicated?). Finally, after devising ways of understanding and presenting the materials that work for them, teachers examine the impact of the materials on students and refine the materials to make them more effective (Loucks-Horsley and Lieberman 1983).
Because staff development and curriculum change are both developmental processes, it might be wise to use one process to affect the other. Curricular change is an opportunity for staff development, and staff development a chance for curricular innovation. As proposed by Allan Glatthorn (1981), staff development can involve teachers in developing instructional materials within a larger curricular framework. Teachers must determine the content that is both essential for all students and requires carefully structured and paced presentation. This is the "mastery curriculum," as distinguished from content that is essential but not necessarily structured (the organic curriculum), enrichment content that is structured but not essential, or enrichment content that is neither structured nor essential. Of the latter two curricula, the former can be team-planned by groups of teachers, and the latter can be student-determined. Once teachers have made these distinctions in their planning, they can evaluate the scope and sequence of their program, compare it to research findings, and revise their intended curriculum. The outcome is a loose-leaf notebook for each teacher with essential information on the curriculum and pertinent research (Glatthorn 1981).

Outline of Activities

In terms of instructional outcomes (achievement test scores and student learning rate), some organizational strategies have proved ineffective in nearly all instances: grouping by sex or behavior, for instance, or inflexible tracking of students. There are also principal behaviors that have proved generally effective. Some of those behaviors are listed below.

A. Listens actively to staff and faculty ideas and creates opportunities for staff to implement innovative teaching arrangements.
   1. Schedules planning sessions to discuss grouping and scheduling arrangements with staff.
   2. Makes the decisions but solicits ideas and feedback from staff.
   3. Attends content-area (departmental) planning meetings.
   4. Reviews staffing decisions with teachers yearly.
   5. Answers questions substantively in faculty meetings; does not delay or turn aside a question.

B. Provides resources and a supportive environment for collaborative planning.
   1. Schedules planning meetings at end of year.
   2. Provides faculty in the same discipline opportunities to work on class preparations at the same time.
   3. Consults with department heads before making departmental schedules.
4. Uses steering committees to prevent scheduling conflicts in activities.
5. Uses staff recommendations.
6. Keeps staff informed of policy changes.

C. Provides forum for all sides to express views on instructional issues. Staffs advising program steering committee with teachers supportive of and critical of the program.

D. Bases student groupings on learning considerations rather than primarily on sex, age, or behavior of students.
1. Considers grouping of students by readiness rather than by current abilities.
2. Involves classroom teachers in placement decisions
3. Tries groupings of high, average, and low-achieving students to each class.
4. Uses cross-age tutoring (older low-achievers tutoring younger students) when beneficial.
5. Encourages academic team games to improve motivation.

E. Monitors track placement decisions.
1. Ensures that all students have equal access to counselors and information.
2. Provides classroom information on career options.
3. Assigns confident, experienced teachers to students needing individual attention.
4. Makes sure that sufficient resources are provided for less-talented students.

F. Considers various options in scheduling.
1. Makes curriculum primary consideration in scheduling.
2. Expands options by varying periods in school day and days in cycle.
3. Uses community facilities for classes to increase options.
4. Varies curriculum and schedules by offering schools-within-a-school.

G. Clarifies placement information for students
1. Defines curriculum in terms of competencies and prerequisites for each course or cluster of courses.
2. Encourages students to plan course work at least two years in advance.
3. Provides teacher/advisors for each student.
4. Monitors and warns students who fall behind in classes.

H. Encourages effective use of instructional teams.
1. Is aware of the variety of team arrangements--those with leaders and those with no leaders.
2. Monitors teacher teams for needed materials and support.
The hiring and supervising of teachers may be the principal's most important instructional leadership task, according to some researchers. Hiring competent people is vital to the health of an instructional program. Regardless of the amount of time principals spend in supervising teachers, the decisions they make about staffing can save headaches and time for instructional leadership later.

Even excellent teachers, however, cannot be self-renewing all the time. They need the opportunity for inservice training and one-to-one supervision by instructional leaders to stimulate them, making the school's instructional goals more than mere abstractions. Formative (that is, ongoing) evaluations allow administrators to improve instruction or change the staff to offer students a better chance to learn.

Hiring, supervising, and evaluating, then, are interactive, dynamic concerns of instructional leadership. They are tasks that demand consummate human-management skills from administrators.

**Hiring**

The teacher hiring process involves close interaction between the principal and the district's personnel office. Even though personnel specialists are trained to weigh qualifications against needs, no one knows a particular school's needs better than its principal. The principal should provide clear, detailed information, then, about the vacancy. What should be the candidate's unique qualities? What are the job expectations? How flexible should the personnel specialist be in narrowing the field? If the principal is acting as his or her own personnel specialist, such a profile is just as important.

Because teachers must work with other teachers as well as with the principal, involving other teachers in preparing the profile is crucial. Hiring can be a collaborative process; there are few teachers, certainly, who do not care with whom they work. It is probably best to include the de facto instructional leaders of the school—those persons that other teachers look to for support and professional help—on the selection committee.

A second stage prior to the interview is information-gathering about candidates. Applicants can submit a written statement of their educational philosophy, showing how they organize their thoughts and communicate. Transcripts show not only a candidate's GPA but also whether they completed courses that show some
depth of knowledge in their field. As one researcher points out, some candidates may have earned good grades by taking less rigorous courses. Personal references, too, are valuable indicators if they can answer specific questions about the candidate's judgment and problem-solving ability, or about their ability to work with others.

Finally, the interview itself allows the principal and the selection committee to clinch a decision. Again, preparation may be the key to exercising an accurate judgment. Interviews can be structured to begin with easier questions and progress to harder ones. Questions should pertain to actual classroom situations and educational trends. An increasingly utilized interview device is to have candidates teach lessons to observe their mannerisms, pacing, and ability to convey concepts. Candidates can also be evaluated on their enthusiasm for joining the faculty, their appearance, their ability to think on their feet, and their ability to speak.

Once a new faculty member is chosen, all the interviewees should be notified promptly. How a school handles job applicants—with respect or with something less than dignity—may affect the image of the school as a good place to work. The quality of future applicants may depend on the school's reputation. Keeping a file of promising applicants—the second or third choices, for instance—provides a pool of possible future teachers that the school has already looked over.

Supervising and Evaluating

Filling a vacancy is a clear and present need that demands immediate attention. Unfortunately, principals (and other instructional leaders) may scrimp when it comes to providing ongoing supervision of teachers. There are at least three reasons why supervising is unpopular. Some literature shows that supervising does not seem to make a significant difference in the way that teachers run their classes. Some evidence, in fact, suggests that supervision produces negative results (Wynn DeBevoise 1984). Also, supervising is often an uncomfortable process in which administrators observe self-conscious teachers and then limit their feedback to innocuous, unthreatening comments.

Finally, observation and evaluation eat up a great deal of time, particularly if they are to be effective. Tom Bird and Judith Warren Little (1985) have found that teachers rarely have faith in an observer's grasp of their teaching in fewer than four classroom visits. As table 3 shows, they calculate that, given a faculty of eighty teachers to observe, one principal alone would be able to observe each teacher once every sixteen weeks if the principal observed five teachers per week. At the rate of three
per week, it would take twenty-seven weeks to observe all eighty teachers; at one per week, it would take two full school years.

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### Table 3
A Small Illustration of Possibilities for Expanding Observation and Feedback

Teachers claim that they do not begin to have faith in an observer’s grasp of their teaching in less than four visits. What are the possibilities for producing observation on that scale? Taking a faculty of 80 teachers . . . .

How long will it take to observe everyone once if observations are done at the rate of:

<table>
<thead>
<tr>
<th>Observers</th>
<th>One a week</th>
<th>Three a week</th>
<th>Five a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal alone</td>
<td>Two years</td>
<td>27 weeks</td>
<td>16 weeks</td>
</tr>
<tr>
<td>Principal and one assistant principal</td>
<td>40 weeks</td>
<td>13 weeks</td>
<td>8 weeks</td>
</tr>
<tr>
<td>Principal and two assistant principals</td>
<td>27 weeks</td>
<td>9 weeks</td>
<td>5 weeks</td>
</tr>
<tr>
<td>Principal, AP, and four department chairs</td>
<td>Variable rates for administrators and chairs, e.g., three a week for administrators and one a week for chairs would require 8 weeks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Bird and Little (1985)

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**Rationale and Benefits**

Why should teacher supervision be a priority? This question is best answered by recognizing that teachers need knowledgeable support. It is doubtful that leaders can perform the other tasks
of instructional leadership without a first-hand knowledge of what students see, hear, and learn in the course of their schooling, or what teachers likewise try to accomplish and have to struggle with. It is hard for a principal to be a credible instructional leader without knowledge. Furthermore, the role of key evaluator of teachers is a logical one for principals—as well as one that is being mandated by state legislatures. In Oregon, for instance, a 1980 law required clinical supervision, including preevaluation conferences, multiple observations, postevaluation interviews, and improvement plans for teachers if necessary.

Instructional leadership means very little unless leaders are willing and able to observe teachers, offer advice about problems, and make formative evaluations that encourage and pinpoint areas to improve. Supervisors must have the knowledge of curriculum and instruction to know what to look for.

The three objections to supervision can also be answered with proven strategies for supervision and with ways of sharing the burden of observing with other responsible instructional leaders on the staff. Although research studies question some of the effects of teacher supervision, most find that, when performed consistently and skillfully, it is a positive component in instructional leadership. It is difficult to tell from the literature critical of supervision strategies whether their view of its ineffectiveness arises from the way in which the observations and supervision are carried out. What the research has shown is that some supervision strategies do improve morale and stimulate instructional innovations. There appears to be a crucial difference, however, between observing as part of an ongoing staff development commitment and observing for a one-time-only evaluation.

Moreover, teachers cannot be sure that observers will really understand their problems in one, two, or even three short visits. Certainly, they would not understand their problems well enough to make suggestions or give advice. Whether this is true or not may be irrelevant as long as teachers perceive it to be true. Thus, observers should proceed with respect and caution, for they may be giving counsel to people who don’t want counsel.

Continuous Improvement and Collegiality

Dealing with teachers’ aims and intentions requires considerably more time and observation than a one-time critique. A teacher’s abilities improve as he or she develops a larger repertoire of instructional and interpersonal strategies. Thus, making too few observations or conducting observations without a program of improvement may, at best, point out some of a teacher’s weaknesses or more obvious strengths. In the most successful
schools, however, there is a commitment to what Judith Warren Little (1982) has called "continuous improvement."

To the extent that teachers do view improvements of their knowledge and practice as a never ending process, they value staff development but place increasingly stringent and sophisticated demands on the nature and quality of assistance. Where analysis, evaluation, and experimentation are treated as tools of the profession, designed to make work better (and easier), and where such work is properly the work of the teacher, teachers can be expected to look to staff development to help provoke questions, organize analysis, generate evidence of progress, and design differences in approach (Little 1982).

Another commitment also underlies the successful leader's observational strategy: collegiality. Other terms relating to this quality also appear in the research literature: participation by all staff, coaching, reciprocity. Principals who want to be good observers and evaluators, for instance, become colleagues—taking a class, coteaching a class, or substituting. Even if a principal cannot work these options into the schedule, there are ways to make teachers feel that they are colleagues sharing professional concerns with other colleagues. Observers' attitudes may make a profound difference in the teaching climate of the school. Bird and Little have compiled a list of sound observational traits, suitable for a contract of observation that instructional leaders and teachers could mutually agree to. They title this list "The Requirement of Reciprocity":

- The observers must assert the knowledge and skill needed to help a practitioner of a complex craft. The least assertion which can be made in observation is something like, "I can make and report to you a description of your lesson which will shed new light on your practices and thus help you to improve them." That is the least assertion that can be made. It is a substantial assertion of knowledge, skill, and discipline. The question is what training and experience, either in teaching or in observing, would permit the observer to make the assertion in good faith.

- The teacher must defer in some way to the observer's assertion, for example, by allowing the observation, by teaching under scrutiny, and by listening carefully and actively to the observer's descriptions, interpretations, and proposals. The question here is, What prior knowledge or experience does the teacher need to grant the observer's claims to knowledge and skill, and thus to participate in the observation in good faith? How could the observer have attained, in the teacher's eyes, the stature which must be asserted in the observation?
- The observer must display the knowledge and skills which s/he necessarily asserts. The observer must make a record of the lesson which is convincing and revealing to the teacher of the lesson, or propose an interpretation of the lesson which can make sense to the teacher, or must offer feasible and credible alternatives to the practices which the teacher used. How can the observer gain and refine those skills in practice?

- The teacher must respond to the observer's assertions, at least by trying some change in behavior, materials, role with students, or perspective on teaching. Such changes are known to require effort, discipline, and courage, but if they do not occur then the observation was fruitless. Here, the requirements of observation become practically circular. The requirement of reciprocity in observation is not met without change on the teacher's part; changes in teaching behavior, materials, roles, and perspective are difficult to make without close support such as observation and feedback. The observer and teacher must start with modest efforts at which they can succeed, meet the requirements of their relationship, and then build on those gains.

- The observer's performance must improve along with the teacher's and by much the same means: training, practice, and observant commentary from someone who was present. Observation cannot be simpler than the teaching it supports. If the observer does not advance with the teacher, the observer's assertions of knowledge and skill gradually are falsified. And the central premise of observation—that mutual examination of professional practices is necessary and good—is shown to be a lie.

Clinical Supervision

Clinical supervision strategies emphasize the coaching and reciprocal relationship of supervisor and teacher. They usually also include a planning conference before observations to agree on the focus of the observation, then involve collecting descriptive information about the teacher's behaviors. Evaluation is left for the postobservational conference, which concentrates on analyzing the description and determining its implications. Evaluation, then, is self-reflection as well as outside judgment. The clinical plan then concludes with the observer and teacher planning for long-term professional improvement and scheduling future observations. (For more information about this process, see Keith Acheson and Meredith Gall 1987).

This ongoing training/development commitment is demanding in the time that it takes, a factor that discourages some principals.
from using the approach. However, clinical supervision can be conducted by teachers as well as by administrators. This peer supervision, or colleague consultation, approach can operate very successfully where instructional leaders exist in the faculty. Department heads, master teachers, or respected colleagues can all be trained to serve in the capacity of a clinical supervisor. Such arrangements mean that the principal must work with teams of teachers, not just individuals. The principal must also support peer supervision by offering training for the observers and giving them released time from their own classes. As Acheson and Gall (1987) suggest, principals may also separate the observations from administrative evaluations, keeping the latter as their own duty.

Coordinating Staff Development

Perhaps the greatest need in teacher development programs is to recognize teachers' problems from their own perspective. Development programs that do not recognize the "social realities" of teaching—the institutional climate of schools, the taboos in sharing professional problems with others, or the feeling of sealing off professional practice from other teachers—contribute only vague theory to teachers, who must deal with the practicalities of the classroom.

Teaching has been characterized as a private activity done in public—an endeavor that calls for a personalized style and strong norms of control. Teacher's rewards are gained primarily from students, rather than from adults. They must operate from a weak base of knowledge about the effects of their teaching and from vague goals that may conflict with those of their colleagues down the hall. Though they may exercise great control in their own classrooms, outside the classroom they may have almost no say at all in decisions that affect them, such as those about budget, materials, students in their classes, or job security. Interactions with other teachers are usually personal rather than professional; interactions with principals are often based on the hope that the principal will not get "too professional" and demand something else of them. As a result of the ethics of practicality, privacy, and control over personal space, teachers often have no incentive for professional development (Ann Lieberman and Lynne Miller 1978, Roland Barth 1981).

In this setting, principals may well feel that it is better to do nothing than to try to initiate real staff development. Activities that actually change teaching habits, just as those that change curriculum, are upsetting. However, the conscientious principal faces a dilemma: do nothing, satisfy teachers' desires to be left alone, and provide no professional growth opportunities for teachers; or do something about staff development, alienate teachers, and perhaps provide some development for teachers who are receptive to it.
This dilemma assumes, though, that principals' only method of involving their schools in staff development is to foist it upon the teachers. However, control is not the optimum method for generating cooperation in groups. It sets up a win/lose mentality in a group; in this case, the teachers may feel clearly that the principal may "win" this one in the short run but lose in bringing about the changes wanted (Chris Argyris and Donald A. Schon 1974). An alternative view is that the principal's role in staff development is to enable rather than to control. That is, the principal is primarily supportive of development initiatives proposed by teachers themselves (Barth 1981).

Supporting Teacher Initiatives

The key to effective and lasting staff development, according to Barth, is to take the risk to support teacher initiatives. "My earlier stage as staff developer was one in which I imposed expectations upon teachers, and compliance lasted only as long as I was there to monitor and supervise. Change which emanates from teachers, on the other hand, lasts until they find a better way." Such staff development is at its best when it comes out of regular, everyday issues arising in the school, not as planned workshops or inservices. According to Barth, "everything a principal does has potential for staff development." Thus, principals can recognize opportunities for capitalizing on staff initiatives in budgeting, space allocation, materials, and personnel.

For instance, Barth cites the example of two teachers who were restive in their well-traveled, predictable routines. One wanted to spend a year with just a half-dozen, perhaps troublesome students. The other, who taught special classes of just those kinds of students, wanted a "regular" classroom, for a change. Their principal allowed them to switch for a year. "More new life, ideas, thinking, personal and professional development came out of that exchange of classes and the year-long interaction between the two teachers than any number of inservice workshops," Barth says. Teachers who were appointed to committees to coordinate curriculum in the school assumed responsibility for problems that they would have previously assumed were somebody else's.

When Barth's teachers were encouraged to communicate with each other about curriculum or presentational matters on an everyday level, they began taking responsibility for many issues of instructional coordination that would have been left to the principal—or to no one. In Barth's elementary school, one subject was chosen each year for a large display, which collated each teacher's plans for the year. A poster in the faculty room revealed what each teacher was doing and in the process revealed the redundancies and omissions in area curricula. "Why was
everybody growing bean seeds? Why was no one doing any physical science?" When teachers noticed the discrepancies, they began talking among themselves to correct the problems.

When teachers began taking responsibility for budgetary matters, some odd requests were made (for 1,000 tongue depressors, for instance), but teachers also began to communicate and make decisions affecting their own curricula. Barth handed out the yearly r allocation to each of the elementary teachers--$45 per child for all instructional purposes--and watched teachers begin to share materials so their funds would go further.

For school faculties that are less open to generating initiatives or where new ideas may produce considerable tension, approaches can be more formal though must stress the principal's support of professional growth. Much teacher development has been modeled on the "deficit training" approach, which assumes that teachers lack knowledge that the trainer has. Thus, it stops short of communicating to teachers that their experiences are legitimate. Lieberman and Miller (1978) suggest that development activities be personally supported by the principal and concentrate on the practicalities of school life. Thus, improvement packages from outside the school won't work unless they are supplemented by the principal's efforts to get the staff to define the directions of the program and unless the principal encourages and rewards teachers for developing new ways of looking at what they're doing.

Effective Inservice Programs

Thus, inservices are more likely to succeed if participants are involved in their planning. Inservice programs, like ongoing supervision, are designed to increase the participants' competence by focusing on a cluster of issues. Unlike supervision, though, inservices happen only once, or as a short series of planned sessions. Generally, inservices are designed to increase awareness of teaching problems and methods, provide a theoretical basis for comprehending teaching issues, teach the skills involved in adding new techniques to a personal repertoire of abilities, and finally transfer the concepts and skills to the classroom.

In a study of over 200 research projects looking into inservice effectiveness, Bruce Joyce and Beverly Showers (1981) found a handful of common characteristics in strong inservice programs:

A. A presentation of theory begins the inservice by offering a rationale and a verbal description of an approach to teaching, a skill, or a technique. Few teachers can transfer theory directly into skills for the classroom. But when theory accompanies the
other components, it boosts skill development and transfer.

B. Modeling or demonstration shows a strategy either with live situations or on video, film, or other media. Complex skills should be modeled often, perhaps with variations in situations. Like theory, modeling does not transfer readily to classrooms for most teachers, but it increases participants' understanding of the skills.

C. Practicing the skill under simulated conditions begins to apply the participants' understanding and results in a high degree of transfer in classrooms.

D. Feedback--particularly if it is a formal list of behaviors to check--appears to improve performances and help teachers set goals. Indeed, studies show that the teachers' changes in strategies persist as long as they receive formal feedback regularly; but when the feedback is discontinued, teachers may gradually slide back to their original behaviors. Feedback consisting of informal discussion following observations is not reliable. However, it is good for increasing teachers' awareness of their style and readying them for more formal training activities.

E. Coaching may be necessary to provide followup for some teachers, guiding them in applying the new skills and models. Coaching means helping the teacher analyze the content to be taught and the best approach to take. Colleagues, principals, supervisors, or outside consultants who have used the techniques could all be coaches.

Outline of Activities

The research findings on instructional leadership in hiring, supervising, and evaluating teachers can be summarized in the following list of effective leaders' behaviors.

A. Hires competent, enthusiastic teachers
   1. Identifies school needs: nature of job, job expectations, special qualities required
   2. Consults school faculty and administrators about job's requirements
   3. Communicates needs to central office staff involved in hiring
   4. Maintains active file of potential applications, updating information when needed
5. Gathers information to make wise hiring decision
   a. Asks applicants for written statements of philosophy
   b. Reviews transcripts and credentials for depth of study as well as grades
   c. Notes academic awards received
   d. Contacts applicant's professional and personal references, as well as previous employers
6. Sets up school screening committee to reduce number of applicants
7. Involves staff members who will work with new appointee
8. Interviews with certain traits in mind as desirable
9. Measures applicants' enthusiasm for joining faculty
10. Informs all applicants promptly of a final decision

B. Supervises staff by encouraging cooperation and continuous improvement
1. Emphasizes positive interaction and mutual support of teachers to improve quality of instruction
2. Nurtures a collegial atmosphere: exchanging ideas and challenging each other to improvement and innovations
3. Arranges for each department head to meet all department faculty at the start of each year to discuss rationales and procedures for supervision
4. Informs teachers who will be evaluated for contract or transfer reasons
5. Ensures that professional goals be set for each department for the year. Requires that department heads and teachers plan for subgoals, methods, and facilities or special equipment to be needed for year
6. Schedules visits to classrooms by department heads or other instructional leaders
7. Suggests support-faculty for each teacher

C. Conducts formal observations collegially and collaboratively
1. Meets with teacher prior to observation(s)
   a. Learns teacher's lesson objectives and strategies for lesson
   b. Finds out teacher's problems or difficulties with particular content or class

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c. Collaborates with teacher in deciding what observation will concentrate on and what data will be collected
d. Shows respect for teacher and listens
e. Helps teacher translate goals and concerns into specific behaviors
f. Suggests a variety of observational techniques that might be used during visit
g. Suggests ways that teacher could gather data on his/her teaching without outside observers

2. Makes formal observation useful to teacher by making helpful notes
a. Records notes of what students and teacher say during class
b. Writes down teacher's questions/student's responses for later analysis
c. Notes if students are working at assigned tasks
d. Makes audio recordings of class
e. Makes charts to show physical movements of teacher or students
f. Videotapes class proceedings
g. Makes notes about specific behaviors of a student if a teacher considers him or her a "problem" student
h. Records feelings about whether class was effective or not

D. Follows up formal observations
1. Meets with teacher after each visit to discuss what was observed
2. Relates teacher perceptions of class to observational data collected during visit
3. Encourages teacher to express feelings and opinions about observational data and class activities
4. Offers teacher alternative teaching techniques and explanations of classroom events
5. Modifies objectives for conference to include teacher's preferences
6. Listens more than talks in a postvisit conference
7. Gives praise for specific development of teacher's skills if observed
8. Recommends resources and training programs in areas in which teacher wants to improve
E. Commits school to inservice training and ongoing staff development

1. Uses informal staff development to set collegial climate for improvement
2. Considers multiple options for staff development: curriculum development activities, job-target planning for individual growth, conference participation, informal conferences with other teachers, clinical supervision by other teachers, joint faculty inquiry into significant school problems, inservice programs
3. Makes sure that coaching is provided for inservice skills to be transferred to the classroom
4. Reinforces participants for attending inservices
Chapter 4

Protecting Instructional Time and Programs

An investigator researching the time devoted to instruction in high schools revealed one of the major problems in improving instruction. In 1973, Philip A. Cusick found that 200 minutes of a student's normal school day were spent on procedural or maintenance tasks. He noted that "the time spent actively engaged with some teacher over a matter of cognitive importance may not exceed twenty minutes a period for five periods a day. This is a high estimate. I would say that if an average student spent an hour to one-and-a-half hours involved on subject matter--that was a good day."

Indeed, other researchers would agree that such a day would be tremendously successful compared to averages from other schools. Other studies have found that instructional time averages 60 percent of a school day, under optimum conditions (no assemblies, field trips, or athletic obligations). Nancy L. Karweit (1983) found that only 21 percent to 69 percent of the day was used in one school for instruction.

Elementary schools vary the most because of their relatively greater teacher autonomy. In one Maryland elementary school, for instance, time allocated for math varied from two hours, fifty minutes per week to five hours, fifty-five minutes per week. Over a year's time, then, one class would get 100 more hours of math than the other (Karweit 1983).

High school requirements may also vary from school to school. Foreign language requirements, for instance, may be two years for the college track in one school and only one year in another school.

Drains on Instructional Time

To understand how instructional time may affect achievement, we must consider the possible drains on productive academic time. Although the length of the school day and the number of school days per year are prescribed in each state, scheduled time for instruction varies widely, as we have seen, from school to school and from classroom to classroom.

Also varying is actual time available for instruction, which is susceptible to a host of unplanned distractions. P. A. systems that intrude into classrooms not only lend a "Big Brother" atmosphere to the school but distract from instructional time in classrooms, as well. Teachers use instructional time for taking attendance, distributing materials entering and leaving the
classroom, late starts or early endings, or such nonclassroom activities as field trips or special assemblies. There are also drains on instruction time that arise from the way that instruction is planned and delivered. Grouping practices, instructional strategies, and the size or distribution of the class can all determine how time is spent in classrooms.

Finally, achievement and instructional time both suffer when students are not in school or find it hard to concentrate because of disciplinary problems in the environment. Truancy and absenteeism can arise from a great variety of societal and personal conditions, ranging from poverty and peer group influence to boredom and poor academic background. Discipline problems often emerge from conflicts, misunderstanding about rules, or the absence of clear boundaries for behaviors.

Models of Learning Time

Before inquiring about what can be done about increasing instructional time, it is important to appreciate the importance of available instructional time and student time-on-task. Most research models of the role of time in classroom learning are derived from a model proposed by J. A. Carroll in 1963. He found that the amount of learning depended on the amount of time a student was willing to spend (perseverance) and the amount of time allocated to the task by the teacher or environment. The quality of instruction and the aptitude (readiness to learn) of the student also affect the amount of time needed to learn. Confusing instruction, for instance, would mean that students would take longer to grasp an algebraic principle or learn to use a French verb. Furthermore, the time actually spent is affected by both the student's motivation and the time allocated by the teacher. So, Carroll's model involves nearly all the elements that affect learning time and relates them to achievement.

Most researchers have followed Carroll in distinguishing between time available for learning and time-on-task. The difference is not hard to understand when we place ourselves in a student's position in a classroom. Time available is the time we could be learning. Time-on-task is the time we actually spend in learning activities: doing what the teacher directs us to do.

Some researchers also distinguish a third use of time—academic learning time—as a time-on-task during which students are actually learning, as opposed simply to performing learning activities. Determining the actual moments when students are learning is more difficult than observing available time or time-on-task. Moreover, actual learning time probably is affected by a wide range of factors not controllable by the school (home distractions, sexual urges, need to relieve cognitive pressure by daydreaming, and so forth). Thus, research concentrates primarily
on the more easily observed, easily measured time factors, correlating the relationship of available time and time-on-task with achievement scores.

Effect of Time on Learning

Studies show that time-on-task is highly related to achievement. The more time spent in learning, the better the outcomes. Students also gain more interest in subjects and a better attitude toward learning when they maximize time-on-task. And just as learning is affected by time-on-task, so time-on-task depends on the quality of available time. It is important to note that the key word here is quality. Students can learn rapidly when the quality of instruction is good and when they are ready for what they are learning. "To put it another way," in the words of well-known researcher Benjamin Bloom (1980), "students cannot actively engage in learning if the instruction is poor and/or they are unable to comprehend what is being taught and what they are to do." In fact, students are unlikely even to spend much time on task if the available instruction is not thoughtfully planned and students' prior learning is not adequately diagnosed.

The solution for attaining higher achievement, then, involves at least one clear answer: Increase available instruction time. Increase time on task. Increase academic learning time.

Improving the Use of Time

But we must be careful here not to oversimplify the research findings. As Lorin W. Anderson (1981) observes, it is wrong to focus only on the "time" factor and ignore the "on-task" part. Simply providing more time for instruction will probably not raise achievement scores. The use of time—that is, the quality of the time spent in doing instructional activities—must also improve. Indeed, some of the factors affecting the quality of instructional time are ways of improving the environment for instruction.

In a study of eight secondary schools, Jane A. Stallings and Georgea G. Mohlman (1981) found that learning climate, including quality of instructional time, was affected by student behaviors, teacher attitudes, school policy, and principal leadership. In schools where policies regarding absences and tardiness were clear, well communicated, collaboratively made, and consistently enforced, the effects increased the likelihood of students' learning and staying on task. Furthermore, teacher morale was higher; students were on task more often. Where there were frequent interruptions during class periods, fewer students were on task, more students misbehaved, and more students were absent. Interruptions can be produced by tardy students or by P. A. systems. Where principals were seen as more respectful and
supportive of instruction, teachers were more involved in their work and students in theirs.

Thus, increasing available instructional time must also be coupled with providing an environment that encourages concentration and attention to instruction. Besides the time and the environment, students also need well-ordered instruction from teachers aware of students' prior knowledge and thoughtful in how they present new material. Anderson (1981) summarizes the key instructional elements clearly in a series of suggestions for increasing instructional time wisely:

* First, tasks should be chosen which are at an appropriate level of difficulty for the students.

* Second, the tasks should be communicated directly to the students. That is, students should know (a) what they are to learn and (b) how they are to demonstrate that learning.

* Third, behavior settings and learning activities which have high degrees of continuity should be chosen (for example, activities involving small groups working on a common goal, activities in which students must make or do something, activities in which the materials are continuously present, and teacher-demonstration activities).

* Fourth, teachers (or other adults) should monitor the learning. Such 'monitoring' would involve, among other things, pacing the learning of the students and indicating the nature and purpose of transitions between activities.

* Fifth, behaviors such as those described in the categories of 'with-it-ness', smoothness, momentum, and group altering should be exhibited by the teacher during activities in which he or she has a direct involvement (such as recitations and classroom discourse) and during the monitoring of activities in which he or she is not directly involved (such as seatwork).

* Sixth, appropriate task-oriented behaviors on the part of the student would be reinforced.

* Seventh, feedback should be given to students concerning their attainment of the specified tasks.
* Eighth, and finally, errors and misunderstandings of students should be corrected before they are allowed to accumulate and interfere with subsequent learning. In general, instruction of the nature described above will result in high levels of student time-on-task.

Outline of Activities

Following are some of the behaviors associated in the research with increasing academic learning time (that is, time spent learning). The list focuses on two crucial dimensions of learning time: ensuring class attendance and using allocated time for instruction.

A. Improving Attendance
   1. Reviews the student conduct policies provided by the school board
      a. Identifies problems in enforcing rules on attendance and discipline
      b. Builds community support, particularly with parents, on rules for attendance and tardiness
      c. Sets schoolwide agreement on policies on attendance, including reporting and followup
      d. Sees that policies are clearly communicated to staff members
      e. Sees that students understand policies on attendance and tardiness
   2. Provides inservices for students, staff, and parents on attendance rules and penalties
      a. Uses automatic dialing systems and pre-recorded messages to contact homes about student absences
      b. Copies successful attendance programs from other schools
   3. Supports teachers in improving classroom management
      a. Provides recognition for teachers who motivate students and require punctuality
      b. Requires punctuality from teachers
      c. Helps teachers establish reasonable rules and apply them consistently
      d. Requires teachers to check attendance promptly every day
      e. Encourages teachers to greet students personally each day
      f. Aids teachers in determining student readiness and prior learning
      g. Helps teachers establish a reward system for good attendance
      h. Shares duty with teachers in informing parents of class absences
i. Refers students with habitual attendance problems to counselors or attendance staff as soon as problems become apparent

4. Enforces rules on attendance and tardiness consistently
   a. Requires parental excuse for returning students, with medical excuse for extended absence
   b. Holds personal conferences with students after extended absences, focusing on concern for student, reason for absence, importance of missed work, and need for good attendance
   c. Institutes truancy proceedings, in line with state and county regulations, for chronic absentees
   d. Encourages attendance competitions between classes, or other methods for increasing peer pressure for good attendance
   e. Uses inschool suspension with strict supervision and academic instruction for serious truancy or tardiness
   f. Does NOT suspend students from school for truancy or tardiness

B. Uses Allocated Time Advantageously

1. Supports careful instructional planning by teachers
   a. Offers inservices to help teachers anticipate problems before they arise
   b. Requires lessons with beginnings, middles, and ends, as well as transitions between the parts
   c. Monitors instructional plans of teachers
   d. Requires course objectives for all courses
   e. Requires mastery performance standards for courses
   f. Plans with teachers to divide course objectives into learning units of 1-2 weeks' duration
   g. Aids teachers in testing progress on unit objectives
   h. Does not let students fail to meet objectives after they try
   i. Requires teachers to develop alternative strategies for students
   j. Holds staff meetings to discuss common problems in instructional planning and offer solutions

2. Protects classroom instructional time from interruption and erosion
   a. Schedules maximum number of minutes each day for instruction
   b. Insists on observing schedule
   c. Expects teachers to start and end classes on time, using the full allocated time for instruction
   d. Avoids interrupting classes for announcements
e. Discourages "drop-in" visitors during instructional time
f. Reduces time spent between classes
g. Seeks limits to clerical duties during instructional time, such as issuing passes, collecting money, etc.

1. Suggests that teachers begin instruction immediately, then perform necessary clerical tasks when students are working

2. Streamlines clerical tasks so that teachers can perform them more quickly
h. Reduces special activity time, increasing instructional time
i. Limits the use of "pull-out" classes and the switching of classes

3. Provides observations and feedback to staff on time priorities in school
a. Emphasizes instruction and learning as the highest priorities
b. Expects school staff to comply with established school regulations for use of time
c. Holds inservices or presentations for whole staff on making written plans
d. Expects teachers to have daily written lesson plans
e. Models behaviors that communicate to teachers and students the expectations for high performance
f. Supervises halls so that students get to class on time and stay in class
g. Visits classrooms to observe teachers and students
h. Develops a school homework policy through a policy development committee drawn from teachers, students, and parents
Chapter 5

Creating a Climate for Learning

Although school climate is hard to define or describe, there can be no doubt it is a real factor in motivating teachers and students to hold expectations for themselves and perform at their best academically. Most principals believe that the school's climate highly influences students' achievements and self-concepts. Climate is sometimes referred to as school environment, learning climate, social climate, or organizational climate. In fact, there seem to be many sources of climate in a school: school discipline procedures, physical layout of the school building, noise levels, presence (or absence) of enthusiasm, amount of litter or vandalism, and so forth. Many of the elements in instructional leadership already covered have a bearing on school climate.

It is possible to single out one aspect of school climate--school learning climate--that affects achievement levels. Luckily, the factors that appear to most significantly affect students' learning are limited in number. Perhaps the most important factor is the set of beliefs, values, and attitudes teachers and students hold about learning. Lawrence Lezotte (1980) and his colleagues define learning climate as "the norms, beliefs, and attitudes reflected in institutional patterns and behavior practices that enhance or impede student learning."

The norms, beliefs, and attitudes that students form about academic learning, come, at least in part, from the adults in the school. In studies of both effective and ineffective schools, it is clear that the norms for learning come from the staff's requirements of students: the amount of time needed for studying, the amount of work assigned, the degree of independent work students can do, the degree of preparedness students feel about the work given them, the appropriate behaviors for school, and the staff's judgments of whether students are capable of learning. Of all these variables--all of them are controllable by the adults in the school--the most important is probably the expectations and judgments about students' abilities to learn.

Effect of Teacher Expectations on Student Achievement

Teacher expectations, in particular, have been linked to student achievement in two ways. Directly, teacher expectations affect the amount of time devoted to instruction, the time spent interacting with students, and the quality of materials and activities used. High expectations for students motivate teachers to better quality instruction. Indirectly, teacher expectations
are transmitted to students and form the students' expectations and sense of the worth of academic work. That is, "the norms, expectations and attitudes that students hold come from their perceptions of what is appropriate in a given social setting," say Wilbur B. Brookover and colleagues (1982), the authors of an intensive inservice program concentrating on improving school learning climate. Whether directly or indirectly, then, the messages that teachers and other staff send also return to them in the form of student norms.

Obviously, in a school where expectations are low, the attitudes of teachers and students can form a vicious circle, a destructive self-fulfilling prophecy. A self-fulfilling prophecy can be described as a process "in which an unsubstantiated judgment or evaluation (of a person, situation, etc.) is treated as though it were absolute fact. Subsequent actions are based on the distorted evaluation." When people act as the evaluator supposed they would, the evaluator is convinced that their original, biased assessment was correct. The power of self-fulfilling prophecies is remarkable in forming opinions; indeed, evidence suggests that they are difficult to change because those who hold them can point to evidence to substantiate their opinions. Furthermore, when we make self-fulfilling prophecies, we nearly always do so unconsciously. Thus, they can be difficult to discover.

To hold high expectations for all students, then, a school staff must share a common belief about students and education and explicitly communicate that belief: that all students can learn and will be expected to learn in this school. Benjamin Bloom (1980) holds that almost all students are capable of achieving age and grade-level objectives. James H. Block and Lorin W. Anderson (1975) made this the basis of their program of Learning for Mastery; they propose making objectives attainable for students by reining to objectives until they are mastered. This belief is quite revolutionary when compared to the operating assumptions of many schools, which stratify students according to levels of expectations.

There is evidence, for instance, that ability groupings quickly become levels of expectations. When students are placed in lower strata, teachers often rationalize an overdose of practice and a much slower pace than is actually required (Joan Hyman and Alan S. Cohen 1979). The result is bored, discouraged students in the lower groups, reinforcing initial assumptions about those students' abilities.

Taken seriously, the belief that nearly all students can learn at their age and grade levels creates a positive self-fulfilling prophecy, the reverse of the negative, prejudiced view. Because teachers are most often unaware of their behaviors, one of the first tasks of instructional leaders may be to set the tone of high expectations for students and teachers. Perhaps the most
effective way of doing so is to offer as part of the school's educational goals that teachers and support staff will strive for every student meeting age- and grade-level objectives.

High expectations are a fulcrum point that supervisors can use to pry teachers and staff away from unhelpful, unencouraging habits of instruction. Raising or lowering expectations have been shown to change the teaching activities listed in table 4, which were compiled by Brookover and colleagues. Teachers' lower expectations of students reduce the use of each of these elements in the teaching repertoire; higher expectations of students increase teachers' effectiveness in each of the areas.

<table>
<thead>
<tr>
<th>Table 4</th>
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<tr>
<td>Teaching Activities Affected by Teachers' Expectations</td>
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</table>

A. Amount and quality of praise for correct answers  
B. Actual amount of teaching students receive  
C. Content covered  
D. Response opportunity factor--  
   1. number of times students are called on  
   2. extent to which the question is challenging  
   3. degree of cognitive demands  
E. Academic content (and more nonacademic activities)  
F. Verbal and nonverbal warmth and acceptance of the student in general  
G. Nonverbal cues--amount of  
   1. eye contact  
   2. forward lean  
   3. affirmative head nods  
   4. smiles  
   5. physical contact  
H. General encouragement and support  
I. Teacher assistance and willingness to help  
J. Wait time (the amount of time a student is given to respond to a question before the teacher gives the answer or moves on to another student)  
K. High academic evaluations--reflected by percentage of students expected to  
   1. master skills  
   2. complete high school or attend college  
   3. do A or B work  
L. Reinstruction of students in failure situations (i.e., probing, restating questions, giving hints, etc., until student arrives at correct answer)  
M. Evaluation feedback and constructive criticism of school work  
N. Academically oriented teacher role definitions (i.e., lower expectations are associated with the belief that social control or other non-academic goals are the appropriate teacher objectives)

Source: Brookover and others (1982)
Improving the Learning Climate through Expectations

Because high expectations depend so heavily on beliefs and attitudes, it is important for principals to communicate the themes of high expectations to teachers and students and then to follow through with action. High expectations need not start or stop at the classroom door. In fact, the tone is easier to sustain if present all day long. For instance, one successful principal profiled by Jo Ann Mazzarella (1983) improved learning climate in a school by becoming accessible to students, speaking to them in the cafeteria and during sporting events. Together with having vigorous material support for instruction and strong expectations for student performance, this principal set the tone of accessible adult authority for the school:

My strategy was this: if I can get a thousand kids and mold and sway their attitudes, their feelings about the school, and their feelings about me as an adult authority figure representative of all the other adult authority figures in the school, if I can set a tone with them, it's going to make things a lot easier for every teacher in every class they teach. I've done that in the four high schools I've been in and it's worked every time.

He mounted a successful campaign to reduce noise and eliminate trash in the school commons area, banning radios without earphones and urging students to pick up their trash. According to one teacher, he changed the climate for academics by getting students to realize that the school was also their responsibility.

Indeed, the key to improving learning climate and expectations may well be in impressing upon everyone--students, teachers, parents, and staff--that there is a close link between daily activities and student achievement. If faculty make disparaging remarks about students or their families, if they reward or praise incorrect answers routinely, or if they reward inappropriate behaviors--sometimes the teachers do this without even realizing that they are doing it--then the learning climate is affected and expectations are diminished.

It may justly be said that where there is complacency and self-satisfaction among the faculty, there is a good chance of declining student achievement. Where there is a belief in continuous improvement and the real potential of students, research has shown that there may be more controversy and conflict in a school over objectives but there is also higher achievement and a better reputation.

To reverse a negative learning climate, then, or to maintain an excellent one, an instructional leader has three tasks, according to Brookover and colleagues:
1. raise teacher expectations of students
2. communicate high expectations to all students
3. establish an instructional program that requires a mastery of objectives and also supports it

There are undoubtedly many ways the instructional leader can bring about each of these goals. For example, principals can share positive achievement data with teachers. Sharing good news about effectiveness in one area can have a "ripple effect," motivating teachers to increase effectiveness in other areas, as well. Ultimately, the good news can affect student achievement, too, by conditioning teachers to expect good performances in formerly successful areas.

The vital element in keeping this ripple effect active may be everyone's belief in its effectiveness. Naftaly Glasman (1984) speculates, for instance, that a leader's belief in the efficacy of sharing with teachers their students' achievement gains may eventually find a place in the leader's evaluation of teachers. From there, it is a short step to influencing how teachers plan their lessons and what they view as their own weaknesses and strengths.

High expectations of teachers, then, may result in high expectations of students. In addition, both teachers and students respond to the common symbols that tie the school together. Leaders are symbol managers, orchestrating the rituals that express the values of the school community. As Glasman's work suggests, and as Karl Weick (1982) has articulated, leaders can create symbols to communicate important values to the school. Symbols such as rewards for academic excellence—honor rolls, citations, and academic contests such as "college bowls"—make visible the underlying values in a school. "Learning is important here," they say, "and we recognize students who learn well." They may also raise the level of camaraderie around academic pursuits, making schoolwork a competition that involves preparation and performance in a group as well as alone.

Rewards and recognition not only add to motivation; they also enhance the sense of common effort that lightens the work of learning and teaching. Teachers working in less-effective schools have been found to speak seldom of their work or the school with enthusiasm. The environment in such schools has been described as "placid and nonthreatening:" "It placed few demands on teachers, but it was also ambiguous and without rewards" (William L. Rutherford 1985). Students, too, have been found to suffer the same malaise of vague expectations and indifference.
Chapter 6

Monitoring Achievement and Evaluating Programs

It is a primary task of instructional leaders to assess and revise the instructional programs in schools. As in the case of supervising and evaluating teachers, whole programs can be reviewed for planning, objectives, success in reaching the objectives, and particular successes and problems. Ultimately, the success of any educational program comes down to the performance of the students: Are they reaching the objectives proposed? Where are they failing and why? The more specifically that problems can be identified, the more successfully the learning problems can be remedied or traced to particular objectives, units, or course activities.

Of course, students in any given level of education attain varying degrees of mastery. As Roland Barth (1980) points out, it is probably unrealistic to expect all students to master all things completely. In any given class, a certain number will grasp some concepts and not others. Schools are now under increasing pressure, however, to raise the level of mastery. They are being held accountable for a minimum number of competencies and are being publicly compared on the basis of standardized test scores. It is imperative, then, that principals and teachers decide which objectives are essential and how best to teach them. Thus, program assessment involves ways of following up the results of the instructional planning and teaching in a school.

For principals and other instructional leaders, the educational literature agrees, the assessment of achievement is not just fine-tuning an existing instructional program. It is an integral part of the instructional planning process.

Stages of Evaluation

Individual courses and whole programs can be monitored in similar ways. Evaluations of both can be divided into three stages: before the course, during the course, and afterwards. The precourse evaluation can be called diagnostic; the evaluation as the course proceeds is formative; and the final evaluation is summative.

Although many principals may perform one or two of these evaluations, few actually perform all three. When program evaluation is discussed, thoughts usually turn to summative (year's-end) evaluations. But the instructional process in a school may remain a mystery after someone—even a principal—reviews the achievement data only at the end of the year. "What happened here?" principals have been overheard muttering.
uncertain how to connect a statistical surprise in test scores with instructional strategies, learning climates, or other variables in the school's instructional environment. To understand the outcomes, an observer must look back at formative (midcourse) testing of the particular objectives in each department and even the performances in classrooms.

**Engineering vs. Medical Models**

To completely monitor programs, the observer must take into account not only test outcomes but also the intentions, interactions, and climates in the school's instructional program (Robert McCormick and Mary James 1983). Monitoring includes all the domains of leadership included so far in this study—academic goals, organization, supervision, focus on teaching, and climate.

Ultimately, then, what is needed in monitoring is a medical model of evaluation rather than the more common engineering model. An engineering model focuses on input and output, comparing the two for cost-effectiveness and economy of expenditure. It is directed toward reaching decisions that use resources optimally. Of course, such decisions have to be made in schools. For instance, would a different advanced-math program still meet the needs of students while using fewer teachers and a smaller expense for materials? The engineering model is best for assessing a program's overall contribution and cost.

A medical model, on the other hand, allows evaluators to develop and revise an existing program. This approach takes into account not only the obvious symptoms of a program's health or malaise but also a myriad of other characteristics, as well. Besides assessing the intended outcomes of a program, it looks for other unintended outcomes, too. So the process and context of education are subject to monitoring (Anderson and others 1975). Medical-style analysis requires, then, that leaders assess often, that they assess a wide range of program characteristics, and that they be flexible in their methods of analysis. Although the medical model of evaluation demands leaders' ongoing attention to the programs in their care, such an approach may prevent a program from becoming a crashing failure.

The instructional leader, then, is the "physician" of the instructional program, keeping a finger on the pulse of the process by knowing program objectives, looking for symptoms of health or problems, and prescribing remedies for troubled or weak areas.
Matching Objectives and Activities

The intended curriculum is embodied in objectives: what ought to be taught. Principals and other leaders can monitor the worth and nature of planned activities to see how they match the general program objectives and how they fit with each other. We have already addressed the subject of goals, which are best regarded as the long-range, broader aims of schools or programs. "Every child up to grade-level standards" or "providing students an adequate reading-base to develop writing skills" may be two goals. Objectives, though, are the short-term aims that break down the goals into specific steps, each of which can be attained in a finite period. Stated in this way, it is clear that objectives not related to goals may be trivial or, even worse, confusing to students.

Although much discussion has centered on the semantics of behavioral objectives, wording is probably less important to a monitor than is the ability to find evidence of whether the objectives are being met. Well-written objectives specify the range of evidence appropriate to judging their success. The objective "to develop in students an understanding of the basic principles of algebra," for instance, could be rewritten to limit what the "basic principles" are: "Students will demonstrate their understanding of the number system and of basic concepts of sets." In some situations, specifying the degree of understanding could also be appropriate: "Students will pass parts 1 and 2 of the departmental competency exam in algebra." In other situations, however, using a common test for evidence of understanding could be inappropriate. In teaching ethics, for instance, the quality of reasoning rather than the accuracy of response is clearly more vital; hence monitoring in values-education could adopt other kinds of evidence.

(It is worth noting, however, that simply because a discipline is quantitative does not mean that its programs should monitor only students' outcome as the numbers of right and wrong answers. Learning the procedures of problem-solving, it can be strongly argued, is occasionally more important in reaching a particular program objective in math or physics than is finding the "right" final answer.)

Attributes of useful objectives are as helpful for monitoring as for constructing programs. In James Popham's (1975) work on sound objectives, the capacity for monitoring the objectives is built into the objectives themselves. He suggests that objectives should clarify the instructional intention, describe a generalizable class of learner behaviors, have criteria for adequately judging students' constructed responses, have the important conditions associated with the objectives incorporated inside the objectives (such as academic prerequisites or vital materials),
and have well-defined performance standards. (See also Thelbert L. Drake and William H. Roe 1986.)

Sources of Data and Methods of Analysis

How can we tell, then, if objectives are being met? Answering this question is not as simple as just looking at the outcomes of teaching—that is, at test scores and the level of satisfaction—though those sorts of evidence are extremely important. As we saw in chapter 2, curriculum implementation accompanies instructional objectives. Implementation analysis, then, must precede outcome analysis. Is the curriculum being run as intended? Is it coordinated and monitored at the classroom level? Following the medical model, program analysis includes testing of materials, spoken content, classroom activities, and the other ways of reaching program objectives. In other words, formative monitoring of programs is as important as summative monitoring.

Polling teachers for their perceptions of a program's strong and weak areas can contribute important information to an instructional leader. A mixture of formal and informal techniques can be used to keep in touch with teachers' concerns. A "concerns screen" is a formalized method of organizing teachers' progress and perceptions into patterns. One example of this sort of opinion-sampling probes the faculty's success at integrating program objectives and resources into their classroom practices. The summary sheet in table 5 provides a scoratable record, easily filled out and easily tabulated.

Other kinds of information gathering can involve the faculty and students, too. Where school attitudes are in question, teachers and administrators can interview students. Teachers can maintain logs of disciplinary actions with pupils, or observers can record and interpret teacher-student interactions in or out of classrooms.

More general, policy-directed sources of information can also include the whole school community. Advisory or advocate teams of teachers, selected from the faculty to represent various points of view, can be convened to debate the adoption of competing in-service plans. A judicial review, consisting of a jury of teachers, can review the data collected on a program to decide if it should be widened, cut, or redesigned. Even an inventory checklist, compiled by teachers and administrators, can inform instructional leaders of the state of materials and the use of such overlooked options as bulletin boards. Group consensus, reached through means such as the Delphi technique, could be very valuable in producing a coordinated set of program goals (Daniel Stufflebeam and others 1985).
Table 3
Sample Building Summary Sheet

<table>
<thead>
<tr>
<th></th>
<th>Outside Intended Program</th>
<th>Getting a Good Start</th>
<th>Well on the Way</th>
<th>Best Practices Working</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tbody>
</table>

1. Time is devoted to science

2. Science is taught according to R-1 Guide

3. Assessment of pupil learning

4. Integration of basic skills

5. The outdoor classroom is used as recommended

6. Recommended materials, equipment, and media are available

7. Inservicing and financial arrangements have been made

8. Long and short range planning

9. Use of class time

10. Teacher-pupil interaction facilitates program

11. Classroom environment facilitates program

12. Instruction is sequenced to facilitate the guided inquiry learning approach

* = one teacher

School: Winter Elementary
Teacher: All grade 3, 4, 5, 6 teachers

Content Analysis

Much of the information available for program monitoring is found in documentary artifacts of teaching. A highly adaptable technique for mining these materials for evidence of a program's success has been called content analysis. This is a broad term for a critical analysis of teaching materials, reducing their complex ideas to lists, matrices, and other skeletal forms in answer to a leader's questions. For instance, a principal might want to look at a textbook in introductory chemistry classes to determine how usable it is. Some of the questions the principal could pose would be about the book's readability, its questions at the end of chapters or units, and its suitability for the teaching methods used in the school.

The principal would probably also want other tools to help perform the content analysis: readability formulas, for instance, to assess the reading-difficulty level; a taxonomy of educational objectives, such as Bloom's taxonomy, to investigate the questions in the chapters; and evaluation notes to match textbooks to teachers. Materials other than textbooks can be analyzed, of course. The contents of tests are fair game, as are job descriptions, state educational plans, or minutes of the meetings of parent-teacher associations.

Needs assessments gain answers to a variety of questions in this way: What educational objectives are implicit in the materials? Which of the objectives seem to be receiving priority attention? What are the main complaints about existing services? (Stufflebeam and others 1985, Anderson and others 1975).

Curriculum Mapping

An offshoot of content analysis, curriculum mapping combines the analysis of intended curriculum goals with the analysis of actual teaching patterns. It is intended to fill the gap that often exists between the intended and the actual curricula. Because of the loose coupling in the organization of schools, there may be no warning to teachers that their priorities in the course content and allotted time differ from those required to meet program objectives. By the time test scores begin to slide, it may be impossible to recoordinate a program.

A curriculum map records what is being taught at each grade level and sublevel, as well as what might be taught. As an example of a curriculum map, table 6 differentiates the various topics in the science curriculum in one school system, divided by grades and marked by total time devoted to each topic.
### Table 6
Curriculum Mapping: Analysis of Data
Science Curriculum of Shady Grove Public Schools

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**TOTAL TIME BY GRADE**

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<th>4.1</th>
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</table>

Legend: I=introduced; R=reinforced; E=expanded
Time Delineation: number equals hours per week per semester

Source: English (1980)
Using a curriculum map, an instructional leader can see the breadth of the curriculum and its actual time priorities. In the table, the science curriculum appears to orbit around four topics: magnetism, nutrition, solar systems, and the human body. A map such as this one can provide a base upon which to decide new curriculum approaches. One such may be to include "optical illusions" in the science curriculum, since it is not being done now.

Conclusion

The commitment to use achievement data in the instructional program is a long-term one. Indeed, it should be, as it begins to pay off most only after an initial year or two. The first year can be a baseline year, during which information is compiled on each curricular group of students (age-groups, for instance, or career tracks). The groups of the first year, then, can be compared with those of later years.

Based on first-year evaluation, subsequent objectives can be set for following years' students. Setting goals may take into account the differences between this year's students and those of previous years: their aptitudes or entering achievement levels, in particular. Each year can be compared similarly, helping the staff evaluate the effectiveness, appropriateness, and value of each program or of key courses.

One of the most important uses of assessments is for the public recognition of success. Assessing means not only being able to improve programs but also being able to celebrate them—to reward the hard work and positive attitudes that produce high achievement. Rewards can also increase the sense of importance in doing well academically among students. Rewards can be bringing in outstanding speakers for the National Honor Society or arranging with local organizations to honor students who succeed academically. A principal's personal recognition of a faculty member's excellence or of the whole faculty for hard work and achievement can improve morale and stimulate better efforts in the future.
Conclusion

This synthetic model of instructional leadership has presented six areas that research and the experience of school administrators have identified as crucial to leadership in schools. Of these areas, setting instructional goals has been found to be the most important because it potentially involves all the other areas of concern and brings past experience into planning for future contingencies.

The sum of these tasks means that an instructional leader is both a conceptualist and a nuts-and-bolts person. Leaders are not just idea-people or, on the other hand, those who perform the district's will, but they are professionals who use both research and practical innovations, cooperating with other professionals—teachers and staff—to further student learning.

A fault of many of the models contained in research studies is that they omit mention of the pervading values of a school. But the motivation supplied by such values as continuous improvement and collegiality is rarely overlooked by those who want to identify the contributions successful leaders make to their schools. Such motivation, which can breathe life into any theory of leadership, may best be compared to the "training effect" in sports: Challenge any part of an organism—challenge it progressively, with steadily increasing increments of expectations—and it will develop increased strength and flexibility. Strong instructional programs may be developed in a similar way by leaders' expecting, contributing to, and rewarding continuous improvements in teaching, learning, and leading. It is a challenge worth the effort.
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