Focusing on managing reading instruction related to the range of differences in the classroom, this paper includes a historical review of managing instruction beginning with examples from the 1800s. It offers a selective review of the literature on managing reading instruction and explores the following: (1) studies of organizational plans such as homogeneous and heterogeneous grouping, various schemes for assigning students to teachers, alternatives for organizing the curriculum, and specific plans for organizing the classroom; (2) studies of classroom behaviors including management effectiveness and descriptions of classroom interactions; and (3) studies of teachers' decision making. A final section contains some conclusions and directions for further study and notes that with regard to present practice, the optimum or universally effective strategy for managing instruction has not been devised and that there may never be a universally effective scheme for all students. Shortcomings in the research on managing instruction and directions for further study are discussed. (MKM)
Organization and Administration in the Classroom for Reading*

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Paper prepared for the 38th Annual Reading Institute, Classrooms in the 80s: Reading Instruction for the Range of Differences, at Temple University, March 1980.

*This paper is adapted from a longer paper, "Managing Instruction," which is co-authored by Anne Wolf, who is on the faculty of the University of Wisconsin-Eau Claire. Her contribution and the assistance of Roger G. Elcrige, Jr., who is a doctoral student at my university, are gratefully acknowledged. Preparation of that paper was supported by the Wisconsin Research and Development Center for Individualized Schooling, University of Wisconsin-Madison.
Organization and Administration in the Classroom for Reading

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My colleague, Anne Wolf, who is on the faculty at the University of Wisconsin-Eau Claire, and I recently prepared a review of the literature on the topic of managing instruction related to reading. My remarks today are derived from that review. While the review is not directed explicitly to the mainstreaming theme of this conference, it does deal with issues that are related to reading instruction for the range of differences in the classroom. I think that inferences with relevance for practices in mainstreaming can be drawn quite readily.

We were impressed that the underlying quest in the literature on managing instruction is to give concurrent consideration to values, content, individual differences, and the structures and processes of effective schooling in seeking to enhance the learning of individual students. Sartain's observation a dozen years ago (Sartain, 1968, p. 197) that Americans continue to "...value the individual person more than all else" still holds, and this overriding fact sets the tone for virtually all of the work that relates to managing instruction.

I will attempt to do three things in this presentation. First, I will present a brief historical review in order to establish a perspective for viewing the topic. Second, I will offer a selective review of the literature on managing reading instruction. Third, I will suggest some conclusions and some direction for further study and consideration.
Historical Perspective

From the very beginning, Americans have been inclined to value the individual student and to seek ways to accommodate the needs and aspirations of individuals in the practice of schooling. In colonial times the teaching of reading, which was both a means and an end of religious training, was handled in dame schools, in village reading and writing schools, or through tutoring in homes and churches (French, 1964). By the middle of the nineteenth century, due largely to increased immigration, the numbers of students in schools had increased and the quality of teaching had decreased to a point where people like Horace Mann had begun to seek ways to make improvements. The basic question at that time remains as the basic question to this day: Given that there are more students who need to learn to read than there are teachers to teach them, what is the best way to organize students, teachers, and the curriculum—to manage instruction—for the effective teaching of reading?

The generalizations that follow sum up major historical trends related to the management of reading instruction.

- Managing instruction became an issue of concern in the mid-1800s when educators began to seek more efficient ways to deal with larger and more diverse student populations.

- The graded plan of school organization, developed in Prussia and advocated by Horace Mann, was soon adopted in urban schools throughout America and it continues as the most pervasive organizational plan in the nation's schools.
Closely following the adoption of the graded school organization, graded series of readers were developed to assist teachers with the systematic teaching of reading. Over the years these series of basal readers have been almost universally adopted and they have been made more and more comprehensive. Taken together the basal reader series are the most potent and pervasive force in reading instruction in the nation's schools today.

Even as graded schools and graded readers have gained in prominence, educators have, almost from the very beginning, struggled to break the lock-step that often accompanies a heavy handed application of the graded approach. By the end of the nineteenth century concerned educators were attempting to differentiate curriculums for different learners, to adapt instruction to individuals' progress rates, and to train specialized personnel to facilitate or augment the work of classroom teachers.

Before World War I, reading instruction was virtually the exclusive business of the elementary schools. After the war, probably because the waste and inefficiency of limited literacy began to be fully recognized, the need for reading instruction at the upper levels of formal schooling and for other groups—such as out-of-school adult illiterates and literate adults with special needs—was acknowledged and resources began to be assigned.
Between 1920 and 1935 the practice of forming three groups for reading instruction—generally students who are achieving below, at and above grade level—was introduced and almost universally adopted in the nation's classrooms. The three-group plan remained dominant into the 1950's, when alternative plans for targeting instruction—for example, individualized instruction, open classrooms with learning centers for reading, and a variety of schemes for team teaching or for cross-class grouping—began to be more widely used. While the alternative plans continue to be refined, adopted and adapted, the three-group plan continues as a mainstay for managing reading instruction in many schools.

Prior to the mid-twentieth century, the major events related to managing instruction in reading were the introduction of grade-level organization in the schools and the development of basal readers. The period since mid-century can be characterized as a time when alternative proposals for managing instruction abound and, paradoxically, innovation is commonplace. Yet even as the limitations of traditional practices are recognized, as new practices are proposed, and as innovation is valued almost for its own sake, the traditional practices linger on. Schools continue to be organized by grade levels, students continue to be assigned to one of three groups for all or most of their instruction in reading, and teachers continue to rely on basal readers to teach reading.
Now, with the historical trends in mind, let's consider again the question of how best to organize students and teachers for effective teaching of reading. The question has an easy answer: Put on student and one teacher together and let teaching proceed through one-to-one tutoring. The teaching of social behaviors and values aside, the implicit goal of most schemes for managing reading instruction is to come as close as possible to one-on-one tutoring. We do not question the wisdom or the virtue of the goal; we simply acknowledge it. Unfortunately, the goal itself presents a problem insofar as managing instruction is concerned because the society has not and is unlikely to commit sufficient resources to make one-on-one teaching an attainable goal.

A more workable answer to the question of how best to organize students and teachers for reading instruction, then, is this: Organize the school and the classroom so as to permit maximum flexibility for dealing with student- and curriculum-centered variables. This answer is adequate insofar as it implies an attainable goal. But it is inadequate in that it says little about bringing student and teacher characteristics, curricular aspects and issues, and situational factors into a reasonable juxtaposition. Fortunately, these are considerations that have already received some attention in the literature and they deserve to receive continued attention as techniques for managing instruction are refined. We have organized our literature review into three categories: Studies of Organizational Plans, Studies of Classroom Behaviors, and Studies of Teachers' Decision Making.
Studies of Organizational Plans

Common sense suggests that some ways of grouping students and teachers, of organizing the curriculum, and of organizing the classroom should be more effective than others. Consequently, there is a substantial literature in which a variety of organizational schemes are described and their effects examined. For convenience, I will consider, first, the concept of grouping and the effects of homogeneous and heterogeneous grouping plans; next, various schemes for assigning students to teachers; then, alternatives for organizing the curriculum; and, finally, specific plans for organizing the classroom.

Homogeneous and Heterogeneous Grouping

The graded school brings together students who are approximately the same age and in roughly similar developmental stages. Yet there are vast individual differences in reading achievement at any grade level, and many educators believe that students ought to be taught to read in relatively stable homogeneous groups. Reading achievement and cognitive ability are the most common criteria for homogeneous grouping; but plans range from complex arrangements for grouping students across grade levels to simpler, and much more common, arrangements for identifying multiple groups within single classrooms. Whatever the plan, the intent of homogeneous grouping is to bring together students who are more nearly alike than students in the entire population. The purpose is to facilitate planning and instruction in order to accommodate students' individual needs and to allow them to experience learning in the company of others who have similar characteristics.
Critics claim that homogeneous grouping provides little more than a security blanket for teachers. Grouping students on the basis of one characteristic, say, achievement or ability, gives no assurance of similarity in other characteristics, such as skill development or learning rate; but teachers may be tempted to ignore the remaining differences. Thus, the critics argue that deliberate heterogeneous grouping encourages teachers to be more sensitive to individual needs and provides a more democratic and realistic learning environment for students (Esposito, 1973).

Plans for heterogeneous grouping vary as widely as those for homogeneous grouping, ranging from simple random assignment of students to self-contained classrooms to elaborate arrangements for cross-grade grouping. A popular but overly simplistic view associates homogeneous grouping with the basal reading program and heterogeneous grouping with individualized reading. In practice, there is no reliable association between the way students are grouped and the way their curriculum is ultimately organized.

Reviewers of the general literature on homogeneous grouping arrangements have concluded that on the average there are no significant gains or losses in achievement when students are homogeneously grouped, but that benefits for students in high achievement groups are offset by losses for students in low achievement groups (Esposito, 1973; Heathers, 1972; Justman, 1968; Spache and Spache, 1977).

Since the early 1970s studies of homogeneous grouping arrangements have not been published regularly. The more recent studies appear to reflect the position that students' educational differences should be dealt with through individualization of instruction, so research on schemes for grouping seem to have passed from vogue. With increases in the number
of special programs for the learning disabled, handicapped, and gifted there may be renewed interest in the effects of homogeneous grouping arrangements.

Most studies of heterogeneous grouping practices have focused on nongraded arrangements and open classroom plans, which are intended to facilitate individualization by eliminating the grade level, curricular, and physical constraints of the traditional self-contained, graded classroom. Heathers (1972) defined nongrading as any approach to individualizing education that allows students to progress at their own rate by eliminating conventional grade-leveling. In his review of the literature on nongrading, he found conflicting and inconsistent results.

The term open education—or open school or classroom—is often associated with schemes for heterogeneous, individualized teaching. The term defies tidy definition, but the following statements seem generally to be accepted. Open education is characterized by sensitivity to the uniqueness of each child. The child is accepted as a significant decision-maker who, in contrast to traditional expectations, participates in choosing goals, selecting materials, and planning his or her own activities (Walberg and Thomas, 1972). Student participation and independence are encouraged by an informal classroom organization that allows students freedom of movement and easy access to learning materials.

Horwitz (1979) reviewed approximately 200 studies of affective and cognitive outcomes associated with open education. About half the studies showed no significant differences in academic achievement, and the rest showed mixed results. Horwitz concluded that, in general, open education neither enhanced nor depressed achievement scores. His conclusion was
similar for most of the affective outcomes, but students' attitudes toward school and cooperation were generally better in open classrooms.

Peterson (1979) reanalyzed data from forty-five studies of open education. She concluded, in line with Horwitz, that traditional instruction appears on the average to result in slightly higher student achievement, but that open education may foster slightly more creativity, independence, and positive attitudes toward schools and teachers. Student characteristics, such as ability and personality, appear to affect how well individuals perform in either traditional or open classrooms.

One likely cause for the many inconsistent and nonsignificant findings on open education is that the term is applied to such a wide range of practices. Horwitz (1979) notes that the term is as often applied to nothing more than an architectural concept of open space as to the quality of student-teacher interactions. Bealing (1972) concluded from a survey of British junior-level teachers that many of the teachers who claimed to be working in open and informally organized classrooms actually controlled seating and student choice of activities in quite traditional ways.

To sum up, while the research on student grouping plans is characterized by many nonsignificant and inconclusive findings, there is some evidence that achievement and attitude may be related to student grouping arrangements.

Assigning Students to Teachers

Whether students are grouped homogeneously or heterogeneously, they need to be assigned to teachers for instruction. At the elementary level,
the most common organizational plan is the self-contained classroom, where a subject-area generalist has responsibility for teaching all, or almost all, subjects including reading to all the students in the classroom-group. Research has rarely been focused on the effectiveness of the self-contained classroom per se, although it is the most commonly employed control treatment in studies of other organizational arrangements. At the secondary level, the most common organizational plan is departmentalization, where reading is taught as a separate subject, usually by a trained reading teacher or specialist who works with several groups of students each day. While educators have experimented with alternatives to these typical arrangements in both elementary and secondary schools, virtually all the research pertaining to reading instruction has been done at the elementary level.

Taken together, the studies of organizational plans for assigning students to teachers suggest that it does not make much difference—at least insofar as reading achievement is concerned—whether students are taught reading in self-contained, departmentalized, or team-taught classes.

Organizing the Curriculum

Reading teachers are responsible for a very complex curriculum and over the years they devised a variety of ways to organize that curriculum and to present it to students. In our review we identified three major patterns for organizing the reading curriculum: (1) the basal reader system, (b) classic individualized reading, and (c) systematic individualized reading.
Most American reading instruction is organized around a basal reader series (Spache and Spache, 1977). Given their present prominence, it is difficult to remember that basal readers are a relatively recent innovation, having become popular only in the 1840s (Smith, 1965). A basal reader series is characterized by its comprehensiveness. The typical series not only structures a total curriculum for teaching reading in kindergarten through grade six or eight, but also provides all of the materials—readers, tests, workbooks, and reinforcement activities—needed for planning and carrying out instruction. Proponents of basal reader series claim that students benefit from the systematic and comprehensive organization of the reading curriculum. Critics claim that the series promote and encourage lock-step group instruction. Yet, despite the widespread use of basal readers, few studies have been done to test the claims of either advocates or critics.

During the 1960s, when American educators were proposing organizational alternatives to homogeneous grouping and self-contained classrooms, reading specialists were introducing an alternative to the basal readers. The plan was called individualized reading. We call it classic individualized reading because many of its concepts and principles are now in general use. In contrast to the highly structured, teacher-directed instruction implicit in the basal reader approach, classic individualized reading is based on students' self-selection of materials and self-pacing of the reading experience. Instead of meeting with prescribed groups each day, the teacher meets as necessary with students in individual conferences to assess progress and teach any needed skills.
There have been few studies of the effects of individualized reading on achievement and attitudes and the results of these studies have been mixed. All things considered, the evidence regarding classic individualized reading is too limited to draw any conclusions about its effects. The fact is that while guidelines for implementing a classic individualized reading program are quite clear and generally agreed upon, there is a great deal of variance in specific application. Consequently, it is difficult not only to characterize the plan in terms of implementation but also to generalize very broadly from the results of studies.

A frequent criticism of both basal reading systems and classic individualized reading plans is that they do not effectively provide for the systematic development of skills. Students who are grouped together because they are "ready" for the same basal reader may not have mutual needs for specific skill development, so the skill development activities assigned to the group may or may not be in line with the needs of individual students. The informal diagnosis and teaching conducted in the classic individualized reading conference may be too brief and haphazard to ensure systematic skill development. In response to these concerns, a third alternative for organizing the reading curriculum evolved during the 1970s; we call it systematic individualized reading.

Systematic individualized reading is a relatively structured approach characterized by explicitly-state instructional objectives, systematic diagnosis and monitoring of individuals' skill development, and explicit teaching of specific skills to individuals and groups as unique and common needs are identified. Instructional planning is usually teacher-directed,
but in some programs, especially in the upper grades, students may self-select the objectives or materials they will work with. The reading laboratory, popular in high school, college, and adult reading programs, often provides the setting for organizing the wide array of materials needed to implement systematic individualized reading instruction.

Materials for implementing systematic individualized reading instruction vary considerably in comprehensiveness, ranging from teacher-made activities for developing a few selected skills to commercially-published programs designed to cover all of the essential skills. The latter—which typically provide sequentially ordered objectives, criterion-referenced tests, teaching suggestions, and a record keeping scheme—are commonly called skills-management systems. Most of the currently published systems are designed for elementary school use; and many of the basal reader series now offer coordinated skills-management systems. Advocates of management systems believe that sequentially organized objectives and continuous monitoring of students' skill development enable teachers to focus their instructional efforts on the specific needs of individuals (Otto & Chester, 1976). Critics are concerned that the approach may be too mechanistic and that by fractionating the reading process it may promote negative attitudes toward reading (Johnson and Pearson, 1975). The debate has been based more on beliefs than on data, and we found few studies that might help resolve the issue.

The few studies that have been published seem to suggest that skills-management systems are effective in terms of students' achievement and self-concept, and that the successful programs for individualizing instruction are characterized by specific behavioral objectives, ongoing diagnosis
and prescriptions, and thorough recordkeeping. But these results are still too tenuous to support firm conclusions. Surveys of skills-management users suggest that while teachers have generally positive attitudes toward the approach, they feel pressured to cover too many objectives in too little time and are concerned about too much testing, overemphasis on skills, insufficient teaching materials, and the time required for recordkeeping. Kanna, White and Morrison (1977) and Kanna and White (1979) studied the strategies employed in implementing a particular skills management system and found that practices varied widely among schools and among teachers.

Organizing the Classroom

The difficulty of planning worthwhile reading instruction for a class of twenty to thirty students is well recognized, so there has been considerable interest both in examining the effects of class size and teacher-student ratios on students' achievement and in searching out ways to enhance the efforts of individual teachers.

Small classes and a low student-teacher ratio are generally believed to be desirable, if not necessary, requisites of effective teaching. Yet the studies of class size and reading achievement have been inconclusive, with results that favor smaller classes in some studies and that show no class-size effects in others. In a general review of the literature on class size, Johnson and Garcia-Quintana (1978) concluded that only younger students benefit from smaller class size and that there is no evidence that a lower student-teacher ratio is associated with higher
achievement. I should note, however, that in a recent reanalysis of the
class-size literature, Glass and Smith (1978) noted small but predictable
class-size effects.

The learning center, which can be operationally described as a
setting which provides and encourages self-directed activities, is often
recommended as a vehicle for attaining individualized instruction and an
open classroom atmosphere. Yet the existing studies show no difference
in students' achievement when learning-center and teacher-directed
approaches are compared.

Computers may be used in the teaching of reading in either of two
ways. Students may actually interact with the computer during instruction,
which is called computer-assisted instruction, or CAI; or the computer may
be used for diagnosis and recordkeeping, which is computer-managed instruc-
tion, or CMI. Studies of CAI have generally yielded favorable results,
but cost and the expertise needed to develop instructional programs appear
to have precluded wise use of CAI in elementary and secondary reading pro-
grams.

We located only one published report each on programmed reading and
on instructional kits. Hammill and Mattelman (1969) compared students'
achievement after instruction with a basal reader alone, programmed reading
alone, and programmed reading in conjunction with a basal reader series
and found no significant differences. A Philippino study of self-learning
kits, summarized in the Reading Teacher (1978), suggested that students
need considerable skill in independent learning before they can benefit
from using the kits.
Studies of a wide variety of tutoring programs including peer tutoring, tutoring by older students, and tutoring by adult aides and volunteers have, with one exception, demonstrated favorable results for the tutoring programs.

While class size and student-teacher ratio have not been shown to have significant effects on reading achievement, it appears that teachers can effectively utilize technology and additional personnel to enhance instruction.

Summary Observations

I introduced this section with the common-sense expectation that the way in which reading instruction is organized should affect students' achievement and attitudes. But our review of studies on grouping, on assigning students to teachers, and on organizing the curriculum and classroom for instruction shows many inconsistent and inconclusive results regarding organizational plans. One could infer from this that the way in which instruction is organized does not matter much in determining cognitive and affective outcomes. But such an inference may not be justified because we found some serious methodological limitations in the studies we reviewed, and because we found some evidence that achievement and attitude are indeed related to specific organizational arrangements.

Attempting to generalize about the effects of organizational arrangements is hazardous because treatments are often inadequately described. Terms such as homogeneous grouping and individualized reading do not represent clearly defined concepts. For example, the term homogeneous
grouping may be used in different studies to describe very different degrees of pupil similarity; or the term individualized reading may be used with no further clarification of actual practices and procedures. The problem is compounded by evidence that in the real world of schools and classrooms even clearly defined treatments, such as skill-management systems, are implemented in a wide variety of ways. Many flaws in research design also limit the generalizability of many of the studies we reviewed. All things considered, while the study of organizational plans seems to offer promise for improving the teaching of reading, that promise has not yet been realized in any significant way.

Studies of Classroom Behaviors

Up to this point I have dealt mainly with studies of different plans and the direct effects of these plans on measures of student outcomes. Now let's shift the focus of attention from the context and outcomes of instruction to the process and outcomes of instruction. The common purpose of process-oriented studies is to gather data on teachers' and students' classroom behaviors. Such data provide descriptions of teachers' instructional management strategies and bases for comparing the strategies of more and less effective teachers, and the literature is already quite extensive. I will consider, first, the extensive literature related to management effectiveness and, then, descriptions of classroom management strategies.

Studies of Management Effectiveness

Although some scholars have concluded that teachers exert little
influence on student performance (see, for example, Coleman, et al, 1966), the literature on teacher-effectiveness supports the belief that the behaviors of individual teachers do affect their students' achievement and attitudes (e.g., Berliner, 1976; Dunkin & Biddle, 1974, p. 21; Medley, 1979). The overall purpose of teacher-effectiveness studies is to identify the teaching strategies that distinguish between more and less effective teachers. That quest has involved a wide range of variables, from teacher warmth to questioning behavior; but we limited our review to management-related strategies like grouping arrangements and monitoring of seatwork.

The typical management-effectiveness study is initiated by identifying management behaviors that may be associated with instructional effectiveness. A group of more and less effective teachers is identified, usually on the basis of student achievement scores, and several observations are made in each teacher's classroom. Since a wide variety of activities go on during any lesson, an observation schedule is used to identify and code the frequency or duration of relevant behaviors. The resulting quantitative data are then correlated with student outcome measures, typically achievement scores, in order to identify behaviors that are associated with teacher effectiveness.

Taken together, the studies we examined suggest that specific classroom management strategies tend to be associated with instructional effectiveness. While I readily acknowledge the danger of overstating generalizations based on investigations of similar but not identical constructs and variables, I make a tentative offer of the following generalizations:
• When students spend more time working on tasks that are relatively easy for them, achievement scores tend to be higher and attitudes may be more positive.

• When teachers do more ongoing diagnosis and utilize the information in planning appropriate instruction, achievement scores tend to be higher.

• When teachers spend more time on academic instruction, achievement scores tend to be higher.

• When teachers or other adults spend more time supervising students as they are working, achievement scores tend to be higher.

• When teachers, peers, or other adults spend more time pacing the rate at which students work, engagement rates tend to be higher. Similarly, student engagement is higher when instruction is teacher-centered.

• When there is less deviant or disruptive behavior, achievement scores tend to be higher.

• When students are allowed more freedom to choose the activities they will work on, achievement scores tend to be lower.

• When students work independently without direct supervision, achievement scores tend to be lower.
Viewed as a whole, these findings suggest that effective elementary teachers maintain a task-oriented, but positively supportive, classroom. Again, however, the generalizations must be viewed with caution. They are based on observations and there are limitations related to research design.

Descriptions of Classroom Interactions

The management-effectiveness literature suggests that elementary reading instruction is more effective when students are directly supervised by an adult. But how much of each student's time is actually spent in supervised activity? Descriptions of time-use during reading instruction provide some tentative answers. For example, Durkin (1978-1979), on the basis of classroom observations, concluded that worksheets and written assignments comprise much of the middle grade reading program. Rosenshine (1979) noted that students may spend more of the time assigned for formal reading instruction (the reading period) with instructional materials than with the teacher. Tikunoff and others (1975) reported differences in reading group functions in second and fifth grade classrooms. In grade two there was more group instruction, groups were usually formed on the basis of reading ability, and they served as the setting for formal instruction in reading. In grade five, students worked more on their own, groups were more likely to be formed on the basis of social needs or interests, and groups served less as settings for formal instruction and more as forums for the exchange of ideas.
Summary Observations

The literature on classroom management behaviors is more enticing than definitive. Our review suggests that although teachers differ considerably in the ways that they organize their classes for reading instruction, students generally spend more time on their own with workbooks and worksheets than in group instruction. Nevertheless, the results of the management-effectiveness studies suggest that teachers' management decisions do affect student outcomes. Perhaps the most striking observation we made is that this line of research has not yet reached adolescence. There are comparatively few studies of management-effectiveness variables and all are recent. Educators have long been advocating methods for managing reading instruction, but they are just now beginning to develop a research base in support of the methodology.

Studies of Teachers' Decision Making

Classroom observation is an appropriate strategy for determining what teachers actually do in the classroom but not for determining why they do it. To get at the reasons why, some investigators have begun to examine teachers' pre-instructional decision making. The research base regarding teachers' pre-instructional decision making is not yet sufficient to support any conclusions or any serious speculation. But it does appear that teachers may be influenced at least as much by personal perceptions and beliefs as by ostensibly more objective information when they make decisions about managing instruction. If this is so, a much better understanding of the presage variables affecting teachers' decisions will be
needed before teachers' management practices can be understood or, probably more important for teacher educators, influenced in any significant way.

Conclusions, Limitations and Directions

In popular usage the term "managing instruction" probably evokes either, both or some combination of two dominant associations: grouping students for instruction and controlling behavior (i.e., behavior problems) in the classroom. But the literature related to managing instruction ranges much more widely. Managing instruction is a complex enterprise, the study of which may involve a wide array of variables. But the purpose of managing instruction is quite explicit: to enhance the learning of individuals by manipulating aspects of the schooling process.

Definitive conclusions from the literature tend to be elusive. In fact, on the basis of our review, we felt better able to identify limitations and promising ways to overcome them than to draw conclusions. In summing up, then, I shall offer some conclusions that might more properly be called generalizations, then I will discuss what we see as three major limitations of the existing research, and finally I will identify some research directions that seem promising.

Conclusions

The general conclusion, or salient generalization, that emerges most prominently from the literature has two parts. First, with regard to present practice, the optimum or universally effective scheme or strategy for managing instruction has not been devised. This is so because such
important student-variables as grade level/chronological age, socio-
economic background, prior achievement and innate ability interact with
the context-variables that shape various management strategies. Conse-
quently, the effects of given practices vary from group to group and from
individual to individual. For example, a highly structured program of
instruction might produce good results with students who have limited
reading ability but limit the performance of high achievers. Second, with
regard to future research, there probably never will be an optimum or
universally effective scheme or strategy for managing instruction. Student-
variables and context-variables will always interact, so what works with
Group A may not work or may even be harmful with Group B. While this is
hardly a highly insightful observation, the fact is that the apparent
purpose of much of the research and virtually all of the practice in
schools has been either to discover or to implement the ultimate scheme
for managing instruction. If the quest for an all-purpose approach to
managing instruction were abandoned the way would be cleared for more
promising and more realistic quests.

Three more specific but highly interrelated conclusions seem justified.

First, taken together the studies involving context- and product-
variables have demonstrated either no effects at all or inconsistent effects.
That is, variations in the context of instruction—which includes the entire
array of factors related to the organization of instruction—have not been
found to be associated in any regular or predictable way with the measured
products, or outcomes, of instruction. We have already alluded to one of
the most likely reasons for such inconclusive results: the studies gener-
ally have not been designed or interpreted with sufficient sensitivity to
the fact that context-variables and student-variables interact. Therefore effects may be washed out when students' characteristics are diverse or effects may not hold up when students' characteristics are systematically varied. For example, a treatment's positive effect with good readers might be washed out in a study where subjects are not stratified by reading ability. Likewise, a treatment with positive effects for poor readers might not produce similar results in a study of good readers. An equally likely reason for seemingly nonsignificant effects could be that the actual outcome was not measured in the study. Standardized achievement tests have almost always been the product measures, but instruction could have a vast array of other--positive or negative--effects. And of course it is possible that many context-variables selected for study are so insipid that they have no measurable or barely marginal effects.

Second, despite the generally inconclusive results of the context-product studies, evidence is accumulating from the more recent classroom-based studies that effective instruction is associated with certain management decisions. The decisions teachers make in assigning tasks, forming instructional groups, and maintaining discipline affect students' involvement in their own learning and, ultimately, their achievement. These results are still tentative but they are encouraging. They suggest that with proper focus context-product research can be more productive than it has been in the past.

Third--and again, despite the generally inconclusive results of context-product studies--the behavior of both teachers and students does differ in different contexts. That is, although treatment effects have not generally been demonstrated by the existing studies, there is
evidence, particularly from the more recent observational studies, that context variables do in fact affect the behavior of students and teachers. These results are also encouraging because they suggest that with more study the significant and most potent context-variables can be identified. Once identified the variables can be examined more closely in systematic experiments.

Limitations

I have already alluded to two important limitations that are inherent in the work related to managing reading instruction: (1) most studies have been designed to seek a universal system for managing instruction rather than routines that work with individuals or with identifiable sub-groups of students, and (2) the product of instruction is almost always evaluated in terms of standardized achievement tests. Taken together these two limitations loom large in explaining why the work to date has been largely ineffectual. They suggest not only that the focus may not have been fine enough to give a clear view of the impact of management decisions but also that the focus may have been misdirected.

Another important limitation is inherent in the inclination to ignore the fact that teachers and students are not passively shaped by their environment—that they actively help to shape it. Consequently, a context or environment may be very different from its label. An administrator may, for example, declare a school "open," but teachers and pupils may continue to behave in quite traditional ways. In such a situation one could hardly draw valid conclusions about the "open" context. Nevertheless, conclusions have often been drawn strictly on the basis of labels. As a
result the literature is cluttered with declarations that have little or no basis in fact.

More limitations could be identified, but a longer list would only labor the point that may already be over-made. The literature on managing instruction is limited by shortcomings that must be overcome before valid guidelines for managing reading instruction can be devised.

Direction

Although limitations are quite pervasive in the existing literature, we did observe some promising trends. We feel the ones that follow are particularly worthwhile in terms of positive potential.

There is essential agreement that much more attention should be given to the actual activities of teachers and students in the classroom—to process-variables—and the recent literature shows that a shift toward a broader focus that includes process-variables has already begun. This is good, because research on managing instruction is unlikely to be fruitful if it continues to ignore the actual, observable activities of teachers and pupils in the classroom. Concurrent attention to context-, process-, and product-variables in order to clarify what really goes on and with what results in carefully described situations is needed.

Another commendable trend is the increased use of qualitative methodologies, such as participant-observation, to examine and clarify the bases for teachers' judgments and planning. Such work can contribute to an understanding of the reasons why teachers make the management decisions that they attempt to implement. Because effective and ineffective teachers appear to manage instruction differently, clarification of the nature and
sources of the differences should be useful.

The growing inclination to question the "open environment" concept of the 1960s, coupled with accumulating evidence that more structured environments produce better student achievement, is still another trend that bears watching. Again, the suggestion is that close attention must be given to what actually goes on in classrooms, whether they be labeled "open" or "structured." Once the labels are defined in terms of students' and teachers' behavior, there can be serious efforts to determine what works best with which students and for which teachers.

Finally, and closely related to the preceding point, there is considerable evidence that the time students spend productively on task is the best predictor of achievement. There is reason, then, to pay particular attention to management decisions that serve to increase students' time on tasks.

All things considered, there are at least two reasons for optimism. First, the American tradition of concern for the individual is not only alive but well and flourishing. Mainstreaming is a case in point. However the issues of mainstreaming may ultimately be resolved, the thinking and activity that relate to the concept bespeak a continuing and sincere concern for the individual. Second, the research enterprise seems to be in the best position ever to tackle complex problems in a way that will yield realistic guidelines for practice. Meanwhile, practice stands to benefit most from reflecting the awareness of interacting context, process and product variables that characterize much of the recent research.
References


