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ABSTRACT

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**Classroom Management in Junior High and
Middle Schools: Findings from Two Studies**

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Abstract

This report summarizes and discusses findings about classroom management from two studies, the Junior High Management Improvement Study (JMIS) and the earlier Junior High Classroom Organization Study (JHCOS). These two studies involved long-term observation in more than 160 classes in a variety of subject areas. Results of the two studies are summarized and illustrated with examples based on classroom observation. Findings about successful junior high management are compared with findings from similar studies of elementary classrooms. Implications for teacher education programs are suggested.

Classroom Management in Junior High and Middle Schools:

Findings from Two Studies

During 1983 there has been increased public attention focused on secondary schools and on issues of school time use and productivity. The most prestigious of several national reports (National Commission on Excellence in Education, 1983) called for expanding the time available for learning through better classroom management. Although skill in managing classrooms is thus recognized as important, teachers, particularly at the secondary level, are provided relatively little information to help them manage and organize classrooms. In a survey of over 2,600 teachers and principals about teacher needs and sources of proficiency development, classroom management was ranked first as a competency needed by teachers, and last as a competency effectively addressed by teacher education institutions (Pigge, 1978).

Certainly, there are no simple answers to improving classroom management, and achieving well managed classrooms in junior high and middle schools is not an easy task. During a school day, teachers make many management-related decisions, each in light of different instructional objectives and student, teacher, class, and school characteristics. However, a program of research on management conducted at the Research and Development Center for Teacher Education at The University of Texas resulted in the identification of general principles and skills that appear to be important in managing classrooms. Two studies focusing on management in grades six through eight involved long-term observation in a total of more than 160 classes in a variety of subject areas. In this report, we summarize and discuss findings about classroom management from both studies. We also compare teacher

management behaviors in junior high classrooms with those in elementary classrooms. No attempt is made to present a general review or summary of literature on management. Several recent reviews and discussions are available (see for example, Brophy, 1983; Duke, 1979, 1982; Emmer & Evertson, 1981). Rather, the purpose of this report is to examine what has been learned about managing middle school and junior high classrooms from the two large studies conducted by Research on Classroom Learning and Teaching (RCLT) program, to illustrate management principles with examples based on classroom observation, and to discuss the findings in light of related research underway at this Center and elsewhere.

Defining Management

A basic assumption of the RCLT management studies was that classroom management encompasses much more than merely dealing with misbehaving students. The following hypothetical, midyear classroom scene will illustrate the range of factors that have impact on classroom management success. Later, as we discuss specific aspects of classroom management, we will return to the case for further consideration.

When the bell for class rings, Jim Brown, an 8th grade science teacher is at his desk, conferring with a student who has been absent. Several students are out in the hall, three stand at the aquarium, and two wait by the teacher's desk for attention. The other students are seated at their desks, visiting. After several minutes, Jim manages to get everyone seated and begins checking roll, but a girl calls out asking what they are doing today. Jim announces the topic and says that they will use their textbooks. Four students say they didn't bring their book and request passes to their lockers. The teacher turns down the request and tells them they will have to share. As he finishes roll call and begins an announcement, a tardy student enters. The teacher stops to question the boy and notices that he has come with no book or supplies.

Jim announces the topic for the day's lesson again and begins a discussion, but while he is talking many students are getting out their supplies. The boy who was tardy borrows paper and pencil. Two students get up to use the pencil sharpener. The teacher stops

his presentation to remind the students that they are not supposed to sharpen pencils when he is talking. The students say they need their pencils to take notes, however, and Jim relents and waits for them to finish. He begins again. The 15-minute lesson is well prepared and well organized, and the teacher uses a model, transparencies, and the chalkboard to help students understand and take notes. The examples and illustrations he uses are appropriate and engaging. Many students seem interested and involved, but students in the center front section of the room answer most of the questions or volunteer comments. Others on the periphery are less involved. Two pairs of students whisper persistently about social affairs. One girl is writing a letter. At least four students take very few or no notes. In fact, three have nothing out on their desks.

At the end of the presentation, Jim assigns three pages of the text for students to read. Then they are to use the text information and the notes from the lesson to answer some questions. The teacher tells students the page numbers and begins to give directions for the written assignment. Two students call out, asking for a repetition of the page numbers. Meanwhile, students are passing back the handout of questions, and several are moving their seats to share textbooks. Some talk persists while the teacher gives directions. When Jim finishes talking, several students ask their neighbors what to do, and one boy loudly calls out to the teacher, who is seated at his desk, with questions that had just been answered: When is this due? Do we have to write the questions? The teacher answers these questions again and announces that he will be calling students individually to his desk to help them with their term projects. He reminds students to keep the noise down.

In the ensuing 30 minutes, the teacher's conferences with individual students are constantly interrupted by students walking up for assistance or calling out questions. The teacher several times asks the class to get quieter, as first the students sharing books and then much of the class begin to talk too loudly. Several students appear to do nothing. Others begin writing without reading the assigned text. Everyone's work is interrupted once, as a boy wanders over to the aquarium and announces that a fish has died. When someone accidentally knocks a glass beaker onto the floor, the teacher has trouble getting students to return to work.

When the bell for the end of class rings, Jim has managed to confer with only four students about their projects. He tells students not to leave until they have returned the handout, which he needs for the next class. Several students complain, saying they haven't copied the questions and won't be able to finish. Others are finished but have put the handout in their notebooks. One student is upset because she has written her answers on the handout. The class ends on a hurried note.

Many classes like the one described above were observed during our junior high classroom management studies. Teachers like Jim Brown are often dissatisfied with their classes, but they may not think of themselves as having management problems, for they equate management with discipline problems, specifically with handling disruptive, disrespectful, or uncooperative students. Yet, in a broad view of classroom management, a teacher's role as manager encompasses many tasks--pacing activities, monitoring work, designing efficient routines and teaching students to use them, providing and organizing materials, among others--that are essential for maintaining good classroom learning environments.

Failure to perform these management tasks well has both immediate and long-term results. Poor management is associated with low levels of student engagement or involvement with learning activities (or low time on task), large numbers of students unable to complete tasks successfully, or a high incidence of inappropriate, disruptive, or off-task, unsanctioned behavior. In addition, in poorly managed classes there may be large portions of class time wasted in slow starts, long transitions, periods of confusion, delay, or waiting for many students. Many of these indicators are clearly present in Jim Brown's class.

Short-term measures such as engagement are not in themselves indicators of effective teaching or learning. However, research has suggested links among measures of student engagement, class time use, disruptive student behavior, and student learning gains. These links have been most clearly demonstrated in basic skill learning in elementary grades (Good, 1979), but a relation between student behavior

and achievement has also been suggested by studies in secondary reading, English, mathematics, and science (Evertson & Emmer, 1982; McGarity & Butts, 1982; Newton & Capie, 1982; Stallings, Needels, & Stayrook, 1979).

Logical criteria for management effectiveness, therefore, are measures of student engagement or involvement in instructional activities and classroom freedom from disruption or inappropriate behavior. The process of classroom management includes all of the things that teachers do (proactively as well as in response to student behavior) to establish and maintain student cooperation and involvement in classroom learning activities. In the RCLT management studies, student on-task rate (a measure of engagement) and low rates of disruption were used as criteria of effective management. Teacher behaviors and classroom conditions related to the management criteria were identified in these studies.

The Junior High Classroom Organization Study

The Junior High Classroom Organization Study (JHCOS) was a descriptive study of 102 seventh- and eighth-grade English and mathematics classes (Emmer, 1981; Evertson & Emmer, 1982). Because a major focus of the JHCOS was on describing how teachers establish well managed classes at the beginning of the school year, classroom observations began on the first day of school and continued through most of the school year. Each observation extended throughout an entire class meeting, and each teacher was observed regularly by at least two different observers. Observers wrote narrative records of classroom events and sequences of activities and completed student engagement ratings (periodic counts of students involved in academic or procedural

activities, off task, or in dead time). They also assessed student and teacher behavior on a number of variables relating to instructional management, rules and procedures, meeting student concerns, managing pupil behavior, disruptive and inappropriate student behavior, and classroom climate. In addition, standardized achievement test scores for students in observed classes were obtained from school district records.

Data analysis consisted of a two-step process. First, data on student achievement gains and student behavior were examined to identify groups of more and less effective managers. Effective managers were defined as those whose classrooms were characterized by:

1. High mean proportions of students engaged or involved in instructional activities, and relatively few students off task;
2. Low occurrence of disruptive or inappropriate student behavior; and
3. High class mean achievement gains, adjusted for entering achievement levels.

The second step in data analysis was to examine classroom narrative records and ratings of specific teacher behaviors, comparing classes taught by effective and less effective groups of teachers.

Results and more detailed explanations of methods of this large descriptive study have been reported by Emmer (1981), Emmer and Evertson (1980), and Sanford and Evertson (1981). In general, findings indicated that effective managers established and consistently used workable, comprehensive classroom procedures and rules, monitored student work and behavior closely, dealt with inappropriate behavior quickly and consistently, communicated directions and instruction clearly, and

organized and paced instruction so that events flowed smoothly, at a pace appropriate for students' ability levels and attention spans. We will discuss each of the aspects of management in more detail in conjunction with results of the subsequent study, the Junior High Management Improvement Study (JMIS) (Emmer, Sanford, Clements & Martin, 1982).

A Field Experiment

The JMIS was conducted to test the principles and generalizations that had resulted from the JHCOS and to learn more about management in different subject areas and contexts. The narrative data collected during classroom observations in the JHCOS provided many specific examples and illustrations of how different teachers in the study established and maintained good learning environments. These data were used to develop a manual for teachers, Organizing and Managing the Junior High Classroom (Emmer, Evertson, Sanford, Clements, & Worsham, 1982). The manual contains guidelines, checklists, case studies, and examples to help teachers organize and plan for the beginning of the school year, maintain good student behavior, and organize instruction.

To assess whether the information in the manual could help relatively inexperienced teachers establish and maintain well managed classes, two teacher groups, balanced for years of experience, grade level and subject area, were formed before the school year began. A total of 38 teachers, grades six through eight in four content areas (mathematics, English, science and social studies) comprised the two groups. One group received the manual and attended two workshops at the beginning of the year. Teachers in the comparison group received the management materials later in the school year, at the end of the study.

Two classes taught by each teacher in the study were observed frequently from the first day of school to monitor the extent to which management practices recommended in the manual were used and to assess the effects of management practices on student behavior. Each teacher was observed about 16 times during the first 6 months of school and eight times during the middle of the year. Each was seen by several different observers, who did not know the group assignment of teachers. Observation procedures were similar to those used in the earlier descriptive study.

Results of the JMIS indicated that teachers who received the manual and attended the workshops at the beginning of the school year used the recommended management strategies and behaviors more than teachers in the comparison group, and that using the recommended strategies helped teachers establish classes with higher levels of student task engagement and cooperation during the first 2 months of school.

Identifying Teacher and Student Behavior Relationships

Although the main focus of the JMIS was on the effects of the experimental intervention on teacher and student behaviors, the large and varied sample in the field experiment provided an opportunity to re-examine relationships between teacher and student behaviors in secondary classrooms. Therefore, a separate, correlational analysis of data from these classes was carried out to identify teacher behaviors related to student task engagement and disruptive behavior. Using data from the first 8 weeks and the middle of the year separately, each behavior variable was aggregated across observations for each observed class. Because most management variables were moderately to highly stable across the two classes taught by each teacher, teachers were used

as the unit of analysis, and group membership (treatment or control) were partialled out of the correlations. Results of the correlations of teacher and student behaviors are summarized in Table 1. The teacher behavior variables used in this analysis were derived from four instruments, described briefly below. (Reliability was assessed using procedures appropriate for each instrument, and only variables achieving significant reliability were used in analyses. Details of reliability procedures and levels are presented in the technical report of the JMIS by Emmer, Sanford, Clements, & Martin, 1982.)

Component Ratings and Addendum Component Ratings. The Component Rating (CR) Scales were used by observers after each observation to assess 54 teacher and student behaviors relating to instructional management, rules and procedures, meeting student concerns, managing misbehavior, and classroom climate. These variables, rated on 5-point scales, were defined in detail in a coder's manual. For each class, ratings on each variable were averaged across observations for two time periods: the first 8 weeks and the middle of the year. Seven Addendum Component Rating (AdCR) Scales were used only during the first week of school. These focused on room readiness for the beginning of school, and the teacher's presentation and review of classroom procedures and rules.

Observer Ratings of Teachers (ORT). At the end of the first 8 weeks of observations, a set of summary ratings of each teacher was made by observers who had seen the teacher on at least three occasions. In addition, at the end of the January-February observations, observers who had seen a teacher at least three times during that period also provided a set of summary ratings. The purpose of the ratings was to

gather information about teaching behavior and activities that might require several observations to assess, or that were expected to occur relatively less frequently than most variables assessed on the Component Ratings. Mean ratings across observers for each variable in each of the two time periods were used in analyses.

Narrative Reader Ratings (NRR). Narrative Reader Ratings were used by readers of the narratives to provide quantitative and qualitative summaries of relevant management variables not possible to assess in a single classroom observation and not included in the ORTs. Readers were assigned to read all of the narratives for a given teacher beginning with the first day of class and extending through the eighth week of school for the class in which the teacher was observed on the first day. Each teacher's narrative set was analyzed by two readers out of a pool of eight readers, and their ratings were averaged for each variable.

Student behavior variables. Student behavior variables used in the correlational analysis were Disruptive behavior, a 5-point rating included in the Component Ratings used by observers after each observation, and On-task rate, a mean proportion derived from Student Engagement counts taken every 10 minutes during observations. These two variables served as the criteria for determining management effectiveness. Disruptive behavior was defined as "any pupil behavior that interferes with the instructional, attentional, or work activities of the teacher or two or more students." On task was an aggregate of two Student Engagement categories, On-task academic and On-task procedural. Other student behavior variables such as Inappropriate behavior and Off-task, Unsanctioned behavior were not used in this analysis because they were both highly correlated ($r = .84$) with Disruptive behavior.

Disruptive behavior and On-task rate were moderately correlated with each other ($r = -.62$).

Describing Junior High Management

Results shown in Table 1 suggest a pattern of management relationships in the JMIS that is consistent with results of comparison of more and less effective manager groups in the earlier JHCOS. No strong differences in patterns of relationships were found comparing the two different management criteria (On-task and Disruptive behavior) or beginning- and middle-of-year observations. In this section of the report we will discuss patterns of results with regard to four major aspects of classroom management: classroom procedures and routines, monitoring student work, managing student behavior, and organizing and presenting instruction. The Jim Brown case and other examples based on classroom observations in both the JHCOS and JMIS will be used to illustrate these findings.

Classroom Procedures and Routines

In both of the junior high management studies, effectively managed classrooms were characterized by clear, well established systems of procedures, routines, and rules that guided students' behavior and minimized interruptions of activities. Table 1 shows that in the JMIS high student On-task rates and freedom from disruption were strongly associated with observer ratings of efficient administrative routines, appropriate general procedures, efficient opening and closing routines, and low incidence of students' calling out for teacher's assistance. Procedures for response/questions during whole-class or seatwork activities, procedures enabling students to get help without interrupting the teacher, and management of outside interruptions were also

significantly related to the student behavior criteria. Somewhat less consistent results were obtained for the variable, Efficient small-group procedures, but group work was used infrequently by many of the teachers in the sample. Among classes in which this work format was more common (such as in science classrooms), procedures for managing group work efficiently were clearly necessary (see Sarford, in press).

In general, teachers of smoothly run classrooms in our middle school and junior high samples relied on well designed and established routines. Routinizing classroom activities appeared to reduce the time and energy needed to accomplish frequently occurring tasks, both instructional and noninstructional. Beginning-class routines illustrate this principle. Some well managed classes began with a routine that required students to take their seats immediately upon entering the room and begin copying objectives and assignments for the day, displayed on the chalkboard. Students were held accountable for having these daily records in a special section of their notebooks. In other classes, students began the class with a short, usually timed practice or review assignment, such as six review problems in mathematics classes, journal writing or fluency writing exercises in English classes, or copying vocabulary words in social studies classes. While students completed these routine tasks, the teachers handled administrative chores without interruptions. Thus, "efficient" routines minimized the intrusion of noninstructional matters into instructional time and fostered smooth transitions into subsequent activities while minimizing demands on the teacher.

Contrast the practices above with those evidenced in the description of Jim Brown's class (which resembled in many ways the less

effective managers' in our studies). In Jim's class no routines were in place for beginning and ending the period, or for handling administrative matters such as student absences and tardies. In addition, Jim and his students were handicapped by poorly established rules and procedures governing student talk during seatwork, students' getting attention or help from the teacher, and communication of assignments. In the two management studies, well managed junior high classrooms generally had procedures that effectively governed student talk, participation in oral lessons and discussions, getting out of seats, checking or turning in work, what to do when work was finished, and ending a class. Less effective teachers, like Jim, had difficulty establishing a system to manage student-teacher and student-student contacts.

Beginning the school year. Both the JHCOS and the JMIS included a focus on teachers' behavior at the beginning of the school year, on the assumption that initial establishment of behavioral expectations and task systems is a crucial stage in management of classrooms and that information about this stage is needed by beginning teachers. In general, these assumptions were strongly supported by study results. The tasks of formulating and establishing workable classroom procedures and work systems had to be accomplished in the first month of school. In general, teachers who were successful at these early management tasks were relatively successful managers throughout the school year. However, a small set of classroom observation variables in the JMIS focused specifically on teacher behaviors during the first week of school. These variables, shown in Table 1, concerned primarily the presentation of classroom procedures and rules to students. Similar

first-week observation variables were not used in the JHCOS, but more effective managers in that sample were rated (in narrative analysis procedures) as more successful in teaching rules and procedures and generally more explicit about desirable student behavior throughout the year (Evertson & Emmer, 1982).

In the JMIS, for specific first-week teacher variables shown in Table 1, relatively few significant correlations with student behavior were found in the first 2 months or the middle of the year. Staying in charge (remaining in the room and active in directing and monitoring the whole class), readiness of materials, and a general rating of procedures and rules well taught were supported by moderate correlations. In addition, analysis of narratives resulted in low, significant correlations between number of procedures and rules discussed (and minutes of discussion) and student on task rates in the first 2 months of school. These correlations add some support to the JHCOS findings that more effective junior high managers are more explicit in this expectation. However, other specific aspects of how procedures and rules were introduced to students (e.g., clarity of initial presentation, discussion of rationales, practice, feedback) were not significant in the JMIS. Combined with the results for the area of workable classroom procedures and rules, these results could suggest that although effective junior high managers must have workable, well thought-out classroom procedures, many aspects of the initial presentation of procedures are not critical. An alternative interpretation of these results is that in the JMIS sample as a whole, teachers were well prepared for the beginning of the year, and there was not much variation in the way they oriented students to their classroom expectations.

Statistics for these variables suggests this may be true. More variation in teachers' first-week behaviors (as well as in general classroom management competence) was noted in the JHCOS sample than in the JMIS.

Monitoring Student Work

Findings shown in Table 1 suggest that in junior high classrooms there is a close relationship between effective work management and appropriate student behavior and task engagement. A consistent characteristic of well managed classes in our middle school and junior high studies was that students were held accountable for completing their work, and teachers regularly gathered information about student progress. Procedures governing student assignments were designed to help students meet work requirements and develop good work habits. Specifically, strong relationships were found between good student behavior and such teacher behaviors as consistently enforcing work standards, having suitable routines for assigning, checking and collecting student work, and effectively monitoring students' progress and completion of assignments.

Differences in the amount of information some teachers routinely gather about student work on a day-to-day basis are illustrated by contrasting the description of Jim Brown's class with the following description of a lesson in a science classroom.

(The class had been introduced to the topic of chemical elements and the periodic chart of elements on the previous day.) During roll check the teacher has students clear their desks, except for pencils. Then he begins class with 6 minutes of review presentation and questioning about the elements, during which most of the students are called on to respond. He distributes a worksheet and gives directions for completing it. Students listen and several ask questions. The teacher answers these, then tells students to hold their questions. He gives the class directions for a second

task: After students complete the elements worksheet on their own, they are to copy a list of elements and symbols from a transparency on the overhead projector. He writes the two numbered assignments on the board. Then he asks students to raise their hands if they have questions or need further assistance to get started on the periodic chart assignment. Five students do. He tells these students to come to the periodic chart, and tells the rest of the class to begin work. If any of them has a question while the teacher is talking with the small group, they are to wait, working on their second assignment if they cannot continue on the first.

The teacher spends about 6 minutes instructing and questioning students in the small group at the periodic chart. When some students working at their desks begin to talk, he reminds the class to work alone on the worksheet, then he finishes his discussion with the small group and sends these students back to their desks.

As soon as the periodic chart instruction is finished, the teacher circulates around the room, looking at students' work and providing assistance when necessary. He finds a boy who had stopped working and helps him get started again. When some talk begins, the teacher stops it with a word or two. As some students begin to copy the list of elements and their symbols from the overhead screen, the teacher announces that there will be a quiz over these elements, their spelling, and symbols tomorrow. He tells students that after copying the list they should begin studying it, and they may work quietly together.

Ten minutes before the end of class, the teacher asks for a show of hands of anyone not finished with the worksheet, and tells these four students to finish it at home and to begin work now on their list of elements. He also announces that he will now begin to check the papers of students who have finished the worksheet, and he circulates around the room to check work and record grades. Near the end of the period, many students are studying quietly in pairs, quizzing each other over the elements and symbols. The teacher stops students' work 1 minute before the bell, reminds them what to bring to class the next day and about the quiz, and tells them to get ready to leave.

In the lesson above, the teacher collected much information about student progress and understanding: in review questions at the beginning of class, in interaction during small-group instruction at the periodic chart, by circulating to help students and look at their work, by surveying to see who had not finished, and by checking the papers of students who had finished. In contrast, at the end of Jim Brown's class period, Jim did not know how many students had finished the assignment

or whether some had misunderstood the directions or failed to start the work at all. The only time he actively solicited information about student understanding was during the content presentation, and then he got little information from students around the periphery of the class.

Effective managers in the junior high studies generally had very clear work requirements and effective routines for assigning, collecting, and checking work. Daily assignments were usually displayed in the same location, and students were held accountable for keeping a record of assignments. Thus, they were held responsible for knowing when work was due and for getting it done. Due dates for assignments were not routinely extended or ignored; students were usually penalized in some way for late work. The work-related procedures and policies in these classes contributed to a sense that the work was important and purposeful.

Managing Student Behavior

As shown in Table 1, results of the JMIS provided strong support for key "maintaining" strategies identified by earlier research in junior high and elementary classrooms. Strong correlations suggest support for consistency in managing behavior, monitoring student behavior closely, and stopping inappropriate behavior quickly rather than ignoring it. Variables related to consequences or specific strategies for responding to student misbehavior were not significantly related to management success. Teachers' citing rules or procedures as a response to disruptive student behavior had been supported by JHCOS results from the first 3 weeks of school, but Table 1 shows no significant correlations from the JMIS data in the first 8 weeks or middle of the year. Other specific strategies for responding to student

misbehavior (except for ignoring, discussed below) received no support from either study. Thus, no unambiguous patterns of findings about how teachers respond to student misbehavior in junior high classrooms emerges from these two studies. Except for a general emphasis on consistency in responding, more successful managers in these studies were successful because they avoided or prevented disruptive student behavior rather than because they responded to it differently than other teachers did.

Rewarding appropriate student behavior (CR5b) received only weak and inconsistent support from low to moderate correlations. In the previous junior high study, the JHCOS, amount of positive reinforcement had not distinguished more and less effective managers at the beginning of the school year. Thus, we can say little about the importance of rewarding student behavior in junior high classrooms, based on these studies. Brophy (1983) has noted that both material and social reinforcements of behavior have limited effectiveness in classrooms above primary grades. His guidelines for effective use of praise (emphasizing contingency, specificity, task focus, and focus on student effort and satisfaction) suggest that much classroom praise or other rewards are probably poorly used and ineffective. Amount of praise or rewards is less important than the nature and timing of their use.

Although strongly supported by correlations between teacher and student behaviors, findings for the variables, Stops inappropriate behavior quickly (CR7c) and Ignores inappropriate behavior (CR7i, negatively correlated with On task, positively with Disruption) do not translate into unambiguous rules about managing student behavior. Significant correlations ranging from $r = .41$ to $.84$ do not suggest that

effective managers never ignored student inappropriate, inattentive, or off-task behaviors. Examination of classroom narratives from the JHCOS and the JMIS showed that many effective teachers sometimes ignored such behaviors, especially if the behaviors were inconspicuous, seemed unlikely to spread into disruptive events, or if attending to them would detract from focus on a lesson. Some effective teachers were particularly persistent in keeping their and their students' attention focused on academic objectives rather than on behavioral or procedural issues. On the other hand, ignoring too much inappropriate student behavior was characteristic of almost all of the teachers experiencing classroom management difficulties. Ignoring students who were not cooperating, not following directions, or not following announced classroom procedures and rules often led to disruptive events and to student confusion over what behavior teachers expected.

Probably the clearest finding about managing student behavior that emerged from the two junior high studies was the importance of active monitoring of student behavior. Several variables related to monitoring (see CR5e, NRR16, and CR1j, Table 1) were highly correlated with the management criteria. Effective managers in both studies maintained awareness of whether their students were listening, participating, understanding, or misbehaving. Poor monitors, in contrast, often focused their attention on a group of students (usually those nearest the front of the room or the teacher's desk) and lost contact with the rest of the class. Some became engrossed with work at their own desk or in interaction with individual students. Thus, they were not aware of students who were inattentive, didn't have the right materials out, or were not following directions. Often incidents of minor inappropriate

behavior escalated to disruptive events before these teachers noticed. Effective monitors were usually able to maintain awareness of all of the students in their class. Even when they worked at their own desk, instructed a group of students (as in our example of the physical science lesson), or worked with an individual student, these teachers were often able to spot off-task students.

Organizing and Presenting Instruction

Although neither the JHCOS nor the JMIS focused on the content of instruction, results of both studies demonstrated that how teachers organize and present instruction is directly related to levels of student cooperation and task engagement. To illustrate, Table 1 shows that in the JMIS consistent, significant correlations were obtained for readiness of materials, appropriate pacing of lessons (five variables), efficient transitions between activities (two variables), and clear communication of explanations, objectives, and directions (five variables). More effective managers in these studies were likely to plan lessons so that students had a lot of work at appropriate levels of difficulty (see CR4a, Student success; and NRR 21, Needs of highest and lowest ability students not met) to do in class. Most, however, usually avoided lesson plans that required students to work for long, unbroken stretches of time on a single seatwork assignment. Using a variety of materials and using differentiated assignments (i.e., different assignments for different students or groups of students, according to achievement levels) were not significantly related to the student behavior criteria, and use of such strategies was relatively infrequent in the sample as a whole.

In both of the junior high management studies (as well as in our elementary study) a set of variables related to teachers' communication skills was consistently related to success in getting student task involvement and good behavior. Teachers who experienced classroom management difficulties often tended to be vague about their expectations and directions and poorly aware of whether their students were understanding them as they spoke. A common pitfall of many poor communicators and managers was illustrated in the Jim Brown scene described at the beginning of this report. In that example, Jim repeatedly gave directions to the class without securing all students' attention. He talked while students were getting supplies, passing materials, and talking to their neighbors. He also failed to monitor student understanding well, and he did not write the assignment and page numbers where students could see them if necessary. Avoidable interruptions (e.g., a student inquiry about the day's topic, questioning of a tardy student, pencil sharpening during the teacher's directions) were allowed to add to the confusion. The resulting problems of students' not hearing and following instructions, in addition to the lack of basic routines and procedures and the teacher's poor monitoring of student work combined to create a classroom management situation not unlike many observed in classes taught by poor managers in our two junior high studies.

Comparing Junior High and Elementary Management

Studies of classroom management have also been conducted by the RCLT program in grades one through six (Evertson, Emmer, Sanford, & Clements, 1983). In this section we will briefly compare classroom management strategies that appear to be important in junior high and

elementary settings. Specifically, we will compare teacher and student behavior correlations from the JMIS with findings from The Classroom Management Improvement Study (CMIS), which used similar management variables and student behavior criteria.

One difference between the CMIS and JMIS results was that in the elementary study, different relationships were found between the teacher behaviors and the two different student behavior criteria, on task and disruptive student behavior. In the junior high school results, most teacher variables were related to both of the student behavior criteria; however, in the elementary study, student engagement (on task) was more closely related to teachers' monitoring of student understanding and to instructional organization variables, while disruptive student behavior was more closely linked to appropriate procedures and rules, strategies for monitoring student behavior, and stopping misbehavior quickly. The student behavior criteria were more closely intercorrelated in the junior high school study ($r = -.62$) than in the elementary study ($r = -.46$). One way to interpret this difference in the intercorrelations is that, compared with elementary students, junior high school students who are not on task are more likely to be disruptive. For many teacher behavior variables, relationships with student disruption were stronger at the junior high level than at the elementary grades. For example, Enforcing work standards, Monitoring student progress, Ignoring inappropriate behavior, Describing objectives clearly, Materials are ready, and Attention spans considered in lesson all had stronger relationships with student disruption in junior high classes than they did in elementary classes. The age group and/or the structure of junior high classes may account for these differences. Young adolescents who

are not successfully engaged in classwork may engage in attention seeking or horseplay more than younger students. In addition, whole-class, teacher-centered instruction, the predominant mode at secondary levels, tends to make inappropriate student behavior public and thus likely to be disruptive.

Other differences between management at elementary and junior high school grade levels are summarized for different aspects of management below.

1. Organizing classroom space and materials. This area appears to be more important at the elementary grades. In the elementary study more variables in this domain were reliably assessed and more were related to on-task rates than in junior high. These differences appear reasonable in view of the fact that self-contained elementary classrooms must be arranged to accommodate a wider variety of activities than most secondary classrooms. Not much variation was observed in arrangement of classroom space and materials in junior high, and only two general variables, Efficient use of space and Traffic patterns, were significant in the JMIS.

2. Classroom procedures and rules. Similar patterns of strong relationships were found in both elementary and junior high schools, indicating the importance of procedures that are central to the functioning of the classroom. Procedures for small group instruction were more important in elementary grades than in junior high schools.

3. Managing student work. Significant relationships were found in both elementary and junior high schools, but relationships were stronger for this domain in junior high grades. Enforcing work standards and having clear work requirements and workable routines for communicating

and monitoring assignments are more critical in junior high school. In secondary grades, but not in elementary, accountability procedures seemed to be closely related to avoiding disruption as well as to maintaining task engagement.

4. First week of school. The initial presentation of procedures and rules (clarity, use of rehearsal or practice, review, feedback to students, discussion of consequences and rationales) appears to have more relationship to management success in elementary than in junior high grades. Effective teaching of rules and procedures in elementary grades requires more time and is more likely to involve practice, rehearsal, and review.

5. Maintaining good student behavior. Strong patterns of relationships for variables in the areas of monitoring student behavior, and responding to misbehavior quickly and consistently were found at both elementary and junior high levels. However, more relationships were found between consequence variables and management success in elementary grades than in secondary grades. Using both negative consequences and rewards consistently was more strongly related to task engagement in elementary grades than in junior high grades.

6. Organizing and presenting instruction. Instructional pacing, conducting smooth transitions, and clear communication of directions and instruction appear to be as important for task engagement in elementary as in junior high grade levels. Some instructional variables seem to be more closely linked to avoiding student disruption in junior high school grades than in elementary grades

In sum, conditions for effective classroom management in middle and junior high schools are in many ways similar to those in elementary

classrooms, with a few exceptions: Junior high students need less elaborate orientation and training in classroom procedures and rules than do younger students with less school experience; the role of rewards and penalties in junior high management is somewhat less clear than in elementary grades; and maintaining student accountability for work appears to be more critical at junior high grades than at elementary.

Implications for Teacher Education and Further Research

The junior high management studies summarized here have particular salience for teacher educators because management--securing students' cooperation and establishing classroom conditions that make learning activities possible--is the first and basic task beginning teachers face. Findings of the studies suggest several answers (although by no means all answers) to the question, "What do beginning teachers need to know and be able to do to be effective in junior high classrooms?"

Knowledge of classrooms. Findings about the importance of comprehensive, workable procedures and routines indicate that teachers need to know in some detail how classrooms and schools operate: what activities and procedures are common, what contingencies and constraints have to be accounted for, and what student behavior to expect in a variety of circumstances. These needs for detailed knowledge underscore the importance of extensive, well focused preservice field experiences in junior high settings. Detailed information about classroom routines and procedures should not be limited to a single model provided by a student teaching supervising teacher. Perhaps more importantly, teacher candidates need a framework of information about effective management to help focus their classroom observations. Often an inexperienced

observer fails to learn much from watching an experienced teacher, because important teacher behaviors and their effects on students go unnoticed. Successful management can look easy. Checklists or observation guides focusing in detail on classroom procedures and management practices can help an observer see why a particular class works smoothly.

Awareness of the central role of accountability. Results with regard to procedures for managing students' assignments and monitoring student progress indicate the important role that accountability plays in effective classroom management at the junior high level. The number and consistency of our findings lend support to Doyle's (1982) proposition that accountability drives classroom task systems and determines the quality of student engagement. Beginning teachers need to be aware of the central role that accountability plays in shaping students' behavior in the classroom. Recent work by Doyle and his colleagues (Doyle, Sanford, Clements, French, & Emmer, 1983) calls attention to the complexity of managing secondary school work. Preparing teachers to deal with this complexity in their planning and conduct of instruction is a challenging task for teacher educators.

Knowledge of proactive management strategies. Beginning teachers need knowledge of proactive strategies used by effective managers in classrooms. Beginning teachers often think about management as an issue of how to respond to student misbehavior. The junior high studies underscore the importance of preventive strategies, particularly the need for teachers to monitor all student behavior, assessing individuals' task involvement, understanding, and appropriate behavior as continually as possible.

Needed Research

The two junior high studies reported here suggest some generic principles of classroom management that operate in core subject area classrooms. Information and materials resulting from these studies have direct, useful applications in teacher education and staff development, but they leave unanswered many important questions about effective teaching at these grade levels. More description of the details behind the teacher behavior variables are needed to illustrate how management works in different classroom situations, atypical as well as typical. Doyle's (in press) series of descriptive studies is an example of the kind of work that is likely to provide such detailed knowledge of classrooms.

A crucial element that is missing from classroom management research to date is the content of instructional activities, the answer to the question, "Engaged in what?" Classroom observation data in the JMIS and the JHCOS did not include descriptions of the content of lessons and assignments, or information about students' performance on specific tasks. Studies that include this detailed information are needed to explain the hows and whys of teacher behavior-student learning relationships, relationships which can be only suggested by correlational analysis of large data sets. Current work at the Research and Development Center for Teacher Education (Doyle, et al., 1983) focuses in detail on the management of academic tasks in a small number of classrooms. This work promises to extend and enrich understanding of management and instruction in secondary schools.

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Table 1
Correlation of Management Practices with Measures
of Disruptive Behavior and Task Engagement

Variables	Disruptive Behavior		On-task	
	BY	MY	BY	MY
Organization of Room and Materials				
Suitable traffic patterns (CR2a)	-.12	<u>-.38</u>	.15	<u>.72</u>
Efficient use of classroom space (ORT16)	<u>-.48</u>	<u>-.38</u>	<u>.44</u>	<u>.66</u>
During the first 5 days of school room is orderly, well organized (NRR1)	<u>-.34</u>	N/A	.28	N/A
Classroom Procedures, Routines, and Rules				
Efficient administrative routines (CR3a)	<u>-.67</u>	<u>-.71</u>	<u>.67</u>	<u>.73</u>
Appropriate general procedures (CR3b)	<u>-.85</u>	<u>-.73</u>	<u>.62</u>	<u>.74</u>
Efficient small group procedures (CR3c)	<u>-.57</u>	-.13	.23	<u>.69</u>
Efficient opening and closing routines (CR3e)	<u>-.75</u>	<u>-.70</u>	<u>.54</u>	<u>.76</u>
Manages interruptions (CR9d)	<u>-.51</u>	<u>-.75</u>	<u>.46</u>	<u>.72</u>
Frequency of come ups while teacher is engaged with other students (ORT7)	<u>.45</u>	<u>.43</u>	<u>-.60</u>	<u>-.48</u>

Note: Beginning of year (BY): $n = 76$ classes, 38 teachers; Middle of year (MY): $n = 59$ classes, 30 teachers.

CR = Component Ratings; ACDR = Addendum Component Ratings; ORT = Observer Ratings of Teachers; NRR = Narrative Reader Ratings.

A single underscore indicates $p \leq .05$, and a double underscore indicates $p \leq .01$.

Table 1, continued

Variables	Disruptive Behavior		On-task	
	BY	MY	BY	MY
Frequency with which students approach teacher when they need help (ORT11)	.27	.31	<u>-.51</u>	<u>-.45</u>
Frequency with which students raise hands when they need help from teacher (ORT12)	<u>-.50</u>	<u>-.62</u>	<u>.53</u>	<u>.67</u>
Frequency with which students call out when they need help (ORT13)	<u>.76</u>	<u>.77</u>	<u>-.51</u>	<u>-.81</u>
Frequent problems with students not bringing materials to class (NRR18)	.02	.25	-.29	-.17
Problems with beginning class procedures (NRR23)	<u>.68</u>	N/A	<u>-.35</u>	N/A
Problems with tardiness procedures (NRR24)	.26	N/A	-.06	N/A
Problems with procedures for students leaving the room (NRR25)	<u>.47</u>	N/A	<u>-.48</u>	N/A
Problems with ending-class procedures (NRR26)	<u>.74</u>	N/A	<u>-.39</u>	N/A
Problems with response/questions during whole class or seatwork activities (NRR28)	<u>.72</u>	N/A	<u>-.41</u>	N/A
<u>Beginning the School Year</u>				
Teacher presents reviews or discusses rules and procedures, first week of school (ADCR1)	.02	N/A	-.02	N/A
Presentation of rules, procedures, and penalties is clear (ADCR2)	-.11	N/A	.04	N/A
Rationale for rules and procedures is explained (ADCR3)	-.12	N/A	.06	N/A
Presentation of rules and procedures includes rehearsal or practice (ADCR4)	-.06	N/A	-.04	N/A

Table 1, continued

Variables	Disruptive Behavior		On-task	
	BY	MY	BY	MY
Number of procedures or rules discussed the first week of school (NRR)	.05	N/A	<u>.38</u>	N/A
Number of minutes of discussion of procedures and rules in the first week of school (NRR)	-.17	N/A	<u>.36</u>	N/A
Teacher provides feedback on students performance of rules and procedures, first week of school (ADCR5)	-.15	N/A	-.26	N/A
Teacher stays in charge of all students, first week of school (ADCR6)	<u>-.58</u>	N/A	<u>.63</u>	N/A
Materials are ready (CR1c--First week only)	-.28	N/A	<u>.53</u>	N/A
Procedures and rules are well taught (NRR9)	<u>-.57</u>	N/A	<u>.36</u>	N/A
<u>Procedures for Managing Students' Work</u>				
Consistently enforces work standards (CR1k)	<u>-.81</u>	<u>-.81</u>	<u>.63</u>	<u>.85</u>
Suitable routines for assigning, checking, and collecting work (CR3d)	<u>-.67</u>	<u>-.66</u>	<u>.62</u>	<u>.75</u>
Teacher was successful in holding students accountable for work (ORT24)	<u>-.62</u>	<u>-.72</u>	<u>.58</u>	<u>.79</u>
Effective routines for communicating assignments (ORT25)	<u>-.71</u>	<u>-.59</u>	<u>.57</u>	<u>.60</u>
Regular academic feedback to students (NRR3)	-.31	-.01	.26	-.25
Work requirements are clear (NRR4)	<u>-.44</u>	<u>-.43</u>	<u>.49</u>	.22
Deadlines are enforced consistently (NRR5)	<u>-.43</u>	<u>-.47</u>	.23	.09

Table 1, continued

Variables	Disruptive Behavior		On-task	
	BY	MY	BY	MY
Effectively monitors students' progress and completion of assignments (NRR7)	<u>-.66</u>	<u>-.61</u>	<u>.46</u>	.31
Regular, efficient routines for checking, turning in, and grading work (NRR8)	<u>-.52</u>	-.36	<u>.46</u>	-.04
Teacher clearly ties class activities to grading system (NRR14)	-.29	-.10	.25	-.08
<u>Maintaining Good Student Behavior</u>				
Consistency in managing behavior (CR5d)	<u>-.84</u>	<u>-.82</u>	<u>.63</u>	<u>.83</u>
Effective monitoring (CR5e)	<u>-.73</u>	<u>-.81</u>	<u>.61</u>	<u>.83</u>
Cites rules or procedures to stop disruption (CR6d)	-.10	.00	-.07	-.13
Stops inappropriate behavior quickly (CR7c)	<u>-.84</u>	<u>-.79</u>	<u>.57</u>	<u>.77</u>
Cites rules or procedures to stop inappropriate behavior (CR7d)	-.02	.02	-.23	-.05
Ignores inappropriate behavior (CR7i)	<u>.65</u>	<u>.69</u>	<u>-.41</u>	<u>-.61</u>
Teacher monitors at the beginning of activities (NRR16)	<u>-.52</u>	<u>-.68</u>	<u>.48</u>	.36
Rewards appropriate behavior (CR5b)	<u>-.36</u>	-.32	.02	<u>.38</u>
Rewards or positive consequences for appropriate behavior are clearly defined (NRR10)	-.12	N/A	-.12	N/A
Rewards or positive consequences are used consistently (NRR11)	-.16	-.18	.02	.04
Negative consequences are clearly defined (NRR12)	-.17	N/A	.28	N/A
Teacher follows through with negative consequences consistently (NRR13)	-.24	-.10	-.11	-.33

Table 1, continued

Variables	Disruptive Behavior		On-task	
	BY	MY	BY	MY
System of consequences is appropriate, sufficient, and effective (NRR15)	<u>-.74</u>	<u>-.62</u>	<u>.33</u>	<u>.44</u>
Monitors student understanding (CR1j)	<u>-.53</u>	<u>-.59</u>	<u>.39</u>	<u>.69</u>
<u>Organizing and Presenting Instruction</u>				
Variety of Materials (CR1b)	-.09	-.33	.27	<u>.38</u>
Materials are ready (CR1c)	<u>-.56</u>	<u>-.47</u>	<u>.53</u>	<u>.64</u>
Appropriate pacing of lessons (CR1h)	<u>-.64</u>	<u>-.74</u>	<u>.60</u>	<u>.77</u>
Attention spans considered in lesson (CR4c)	<u>-.60</u>	<u>-.55</u>	<u>.47</u>	<u>.62</u>
What is the efficiency of transitions? (ORT6)	<u>-.79</u>	<u>-.78</u>	<u>.61</u>	<u>.86</u>
Teacher consistently plans enough work for students (ORT18)	<u>-.61</u>	<u>-.76</u>	<u>.49</u>	<u>.82</u>
Teacher allows activities to continue too long (ORT20)	<u>.64</u>	<u>.62</u>	<u>-.65</u>	<u>-.64</u>
Typical assignments are too short or easy (ORT21)	<u>.70</u>	<u>.59</u>	<u>-.58</u>	<u>-.57</u>
Effective conduct of transitions (NRR17)	<u>-.61</u>	<u>-.48</u>	<u>.52</u>	<u>.62</u>
Describes objectives clearly (CR1a)	<u>-.61</u>	<u>-.42</u>	<u>.60</u>	<u>.51</u>
Clear directions (CR1d)	<u>-.67</u>	<u>-.69</u>	<u>.59</u>	<u>.82</u>
Waits for attention (CR1e)	<u>-.77</u>	<u>-.81</u>	<u>.54</u>	<u>.77</u>
Clear explanations and presentations (CR1i)	<u>-.70</u>	<u>-.50</u>	<u>.55</u>	<u>.59</u>

Table 1, continued

Variables	Disruptive Behavior		On-task	
	BY	MY	BY	MY
When giving instructions teacher questions to determine student understanding (ORT23)	-0.25	-0.21	.26	.14
Frequency of digressions, irrelevant comments, and sustained interruptions during instruction (NRR22)	<u>.43</u>	<u>.66</u>	-.19	-.34
Different assignments and activities for different students (CR1g)	-.28	-.12	-.04	.05
Student success (CR4a)	<u>-.55</u>	<u>-.75</u>	<u>.49</u>	<u>.74</u>
Needs of highest and lowest ability students are not being met (NRR21)	<u>.44</u>	<u>.58</u>	<u>-.52</u>	<u>-.42</u>