

Classroom Management: A Critical Part of Educational Psychology, With Implications for Teacher Education

Edmund T. Emmer

*Department of Educational Psychology
The University of Texas at Austin*

Laura M. Stough

*Department of Educational Psychology
Texas A&M University*

Research on classroom management is reviewed, with an emphasis on lines of inquiry originating in educational psychology with implications for teacher education. Preventive, group based approaches to management provide a basis for teachers to plan and organize classroom activities and behaviors. Studies of teacher expertise and affect provide additional perspective on teacher development and on factors that influence management. Cooperative learning activities and inclusion of children with special needs illustrate particular contexts that affect management. Utilization of classroom management content in educational psychology components of teacher preparation is discussed.

Classroom management has been an important area in educational psychology for some time. Research findings have been applied to inservice and to preservice teacher preparation programs, as well as to systems of teacher assessment and evaluation. Classroom management also represents a significant aspect of the teacher's pedagogical knowledge and is often found as a component of taxonomies and descriptions of core knowledge for educators (e.g., Council for Exceptional Children, 1998). Some researchers have suggested, moreover, that novice teachers may need to reach a minimum level of competency in management skills before they are able to develop in other areas of instruction (Berliner, 1988). Classroom management thus merits careful attention by educational psychologists who are interested in their discipline's impact on education.

WHAT IS CLASSROOM MANAGEMENT?

Definitions of classroom management vary, but usually include actions taken by the teacher to establish order, engage students, or elicit their cooperation. For example, the working

definition used in a National Society for the Study of Education Yearbook on the topic (Duke, 1979) follows: "The provisions and procedures necessary to establish and maintain an environment in which instruction and learning can occur" (p. xii). More recently, the conceptualization has been expanded by delineating both the complexity of the setting in which the strategies and procedures are enacted, as well as the scope of the teacher's goals in carrying out management behaviors. For example, Doyle (1986) summarized it as "The actions and strategies teachers use to solve the problem of order in classrooms" (p. 397). Building on Jackson's (1968) analysis of classroom life, he noted that management's complexity results from several properties of classroom teaching, including multidimensionality (varied events and persons), simultaneity (many things happen at once), immediacy (the rapid pace of events limits reflection), unpredictability (of events and outcomes), publicness (events are often witnessed by many or all students), and history (actions and events have pasts and futures). Jones (1996) emphasized the comprehensive nature of classroom management by identifying five main features:

1. An understanding of current research and theory in classroom management and students' psychological and learning needs.
2. The creation of positive teacher–student and peer relationships.

3. The use of instructional methods that facilitate optimal learning by responding to the academic needs of individual students and the classroom group.
4. The use of organizational and group management methods that maximize on-task behavior.
5. The ability to use a range of counseling and behavioral methods to assist students who demonstrate persistent or serious behavior problems (p. 507).

This broad view of classroom management encompasses both establishing and maintaining order, designing effective instruction, dealing with students as a group, responding to the needs of individual students, and effectively handling the discipline and adjustment of individual students. Similarly to Jones (1996), most authors of texts on classroom management adopt a comprehensive view, although the inclusion of Jones' third item, choosing methods of facilitating optimal learning, makes management difficult to distinguish from teaching in general.

Most research on classroom management has attempted to identify teacher strategies and behaviors that optimize one or more of the goals of management. Although multiple and broadly defined goals would be ideal, most researchers have had to cope with the unfeasibility of assessing a wide array of outcomes in a large enough sample of classrooms to produce dependable explanations for observed results. Consequently, although some studies have used student achievement or attitudes as outcomes, most management research has been concerned with identifying how teachers bring about student engagement and limit disruption.

The rationale for adopting behavioral outcomes as criteria for defining managerial effectiveness is that they can be empirically connected to achievement outcomes (see discussion later), and also because there is a logical argument for their validity. Regardless of the nature of a given learning task, it makes sense that students must be engaged in order for learning to occur. Thus, on-task behavior is a reasonable goal of management. Furthermore, disruptive behavior is likely to interfere with instructional activities and to distract other students from learning. Good classroom management, then, is viewed as a condition for student learning, by allowing teachers to accomplish other important instructional goals. Kounin (1970), for example, noted

The focus upon group management skills actually enables the teacher to program for individual differences and to help individual children. If there is a climate of work involvement and freedom from deviancy, different groups of children may be doing different things, and the teacher is free to help individual children. (p. 145)

Although we think this is a reasonable point of view, it does not necessarily follow that students in an orderly classroom environment will accomplish all of the other instructional goals identified with some comprehensive definitions of classroom management. In particular, as McCaslin and Good

(1992, 1998) discussed, some classroom management systems might be at odds with instructional or curricular goals. For example, rule-and-consequence based systems, such as Canter and Canter's (1976) initial version of Assertive Discipline, may limit student opportunities for choice and participation in classroom governance. In such classrooms, attempts to help students become self-regulated learners would be inconsistent with the direction of authority in a teacher-student relationship. The management style that teachers employ should be congruent to the teachers' instructional goals for their students, the types of activities used in the classroom, and the characteristics of the students themselves. Ideally, management and instruction are adapted by reflective teachers to take such factors into account. More classroom research, such as that of Allen (1986), would help clarify the complex interplay between management approaches and individual student goals.

Significant Lines of Inquiry

Contemporary classroom management research was substantially influenced by the studies of Jacob Kounin and his colleagues (1970). Kounin's work was conducted in the tradition of ecological psychology (cf. Jacob, 1987), which focused on determining, within specific behavior settings, environmental conditions that influenced behavior. Kounin's early studies examined desist events following inappropriate behaviors. After determining that the nature of desists was not consistently predictive of managerial effectiveness, he identified a set of teacher behaviors and lesson characteristics, including withitness, smoothness, momentum, overlapping, and group alerting, that were associated with student work involvement and freedom from deviancy. Kounin was also interested in questions that seem surprisingly contemporary, such as whether managerial behaviors that work for regular students have the same effects on students identified as emotionally disturbed in the same classrooms. His answer was "yes," at least in whole class behavior settings in regular classrooms (Kounin & Obradovic, 1968). Kounin's work helped shift the focus of management research from reactive strategies to preventive strategies and from teacher personality to the environmental and strategic components of management. His work also highlighted the influence of classroom activities as a source of important variations in student and teacher behavior. Other research in the ecological psychology tradition, including work on classroom seating arrangements (cf. Lambert, 1994) and on transition management (Arlin, 1979), contributed to this line of inquiry.

Process-outcome research during the 70s also served as impetus for examining classroom management. Studies in this tradition targeted teacher behaviors that predicted student outcomes, primarily student achievement gains. For example, Brophy, Evertson, and colleagues (Anderson, Evertson, & Brophy, 1979; Brophy & Evertson, 1976) initiated a series

of large-scale process–outcome studies in elementary and junior high or middle school classrooms. Some of the more consistent correlates of student achievement gains in these studies were managerial behaviors, such as monitoring student behavior, communicating clear expectations, keeping students engaged in academic tasks, and minimizing disruptions. Similarly, other classroom-based research found relations between managerial aspects of teaching behavior and achievement outcomes. Good and Grouws (1977) conducted an extensive program of research on elementary grade mathematics instruction. They found that teachers whose classes had greater achievement gains had better management skills, and that they spent less time in transitions and dealing with discipline problems. Such teachers also managed instructional activities more effectively, by keeping activities moving at a brisk pace and by providing clear explanations and directions. Another series of studies conducted by the Soars (Soar & Soar, 1979) highlighted the importance of effective management in the classroom. These studies differentiated among management of student behavior, learning tasks, and thinking, noting that what may be optimal control varies across these domains. They noted that higher levels of control over student behaviors such as movement and talk were associated with higher achievement, but that the relation was curvilinear for student thinking and for learning tasks.

Building on the identification of the importance of classroom management in the process–outcome research literature, a series of field studies was conducted to better understand important managerial features and properties, and how they were established and maintained. Initial studies were done in 27 elementary and 51 junior high or middle school classrooms (Anderson, Evertson, & Emmer, 1980; Emmer, Evertson, & Anderson, 1980; Evertson & Emmer, 1982). Influenced by the need to describe carefully the teachers' managerial activities in their classroom context, qualitative data, including extensive observer field notes and interviews with teachers, were also collected. Another important feature of these studies was the extensive use of classroom observation at the beginning of the school year, at which time, it was hypothesized, important managerial tasks took place. Groups of more and less effective classroom managers were identified and compared, using process measures, descriptive analyses, and teacher interview data, to describe aspects of good classroom management. In addition, classroom management in important contexts, such as lower socioeconomic status classrooms (Sanford & Evertson, 1981) and highly heterogeneous classes (Evertson, Sanford, & Emmer, 1981), was examined and described.

Although some of the details varied with grade level, subject, and socioeconomic background of students, the concepts and principles that emerged presented a coherent picture of how a well-managed setting is created. Two key principles follow: (a) good management is preventive rather than reactive, and (b) teachers help create well-managed classrooms by identifying and teaching desirable be-

haviors to their students. At the beginning of the school year, effective teachers had a clear conception of what student behaviors were desired, and they taught these expectations to students in several ways. They established rules or guidelines for desired behaviors; they planned and taught routines and procedures for class activities to students (a task that could take several weeks in complex settings); and they monitored student behavior and work carefully, so that initial problems were detected and corrected before inappropriate behavior could become established. The emphasis during the first few weeks of instruction was to provide successful academic experiences, with feedback to students designed to help them learn desirable behavior in the context of their academic activities. This early emphasis resulted in a more positive climate and student cooperation throughout the year. Effective teachers maintained their management system by monitoring and providing prompt feedback, pacing class activities to keep them moving, and by consistently applying classroom procedures and consequences.

The next studies were two field experiments in which groups of teachers in four school districts participated in beginning-of-year workshops and received training in the management principles and concepts identified in the previous studies. In comparison to random control groups, experimental group teachers utilized more of the recommended managerial behaviors and their classrooms had higher levels of student engagement and cooperation. These studies also extended and corroborated findings on dimensions of management derived from the prior studies (e.g., Evertson, Emmer, Sanford, & Clements, 1983; Sanford, Emmer, & Clements, 1983). Further work by Evertson and colleagues (Evertson, 1985, 1989; Evertson & Harris, 1999) resulted in a comprehensive teacher training program for classroom management that was selected for the U.S. Department of Education's National Diffusion Network program. Studies on this program indicated its effectiveness in improving student academic performance, teachers' managerial practices, and student behaviors.

Another comprehensive program that incorporates and extends principles from the management research literature has been developed and validated by Freiberg and his associates (Freiberg, 1999; Freiberg, Stein, & Huang, 1995). In addition to emphasizing prevention, their program also focuses on school-wide changes, which includes an emphasis on building a caring climate, and the encouragement of student responsibility through participation in management decisions and functions. Validation of this program has been conducted in inner city schools, where its use has resulted in improved school and classroom climate, student behavior, and academic performance.

In contrast to the aforementioned large-scale studies of classroom management programs, numerous small-scale studies (often dissertation research) have also been done of "packaged" programs such as Assertive Discipline (Canter &

Canter, 1976), whose components have a less secure research base. Results for these latter programs are not particularly supportive, although applications of Reality Therapy (Glasser, 1978) to managing problem behaviors of individual students showed promising results (Emmer & Aussiker, 1990). Research is needed to determine whether updates of some of these programs, such as Glasser's (1990), are effective.

Classroom management research has implications for a number of educational policy matters, such as teacher testing and evaluation, professional development, school reform, and how the public perceives schools. Knowledge of this body of scholarship adds to educational psychologists' ability to contribute constructively to school policy. When short-term, simplistic, or reactive approaches are proposed by policymakers or administrators, we can recommend strategies that are preventive, comprehensive, and sensitive to the realities of the classroom. The short review previously discussed is intended only to sketch some of the main lines of inquiry that have contributed to our current understanding of classroom management. Readers interested in more background will find reviews by Doyle (1986) and Jones (1996) informative.

OTHER RESEARCH WITH IMPLICATIONS FOR CLASSROOM MANAGEMENT AND TEACHER EDUCATION

Research programs that have implications for classroom management have evolved as research in the field has taken a more cognitive slant. These areas of research include the study of teacher cognition—especially development of teaching expertise, affective aspects of teaching and management, and the influence of the classroom context on managerial approaches and strategies.

Teacher Cognition, Expertise, and Classroom Management

Research and writing on teacher cognition and decision making had their genesis approximately 30 years ago as part of the cognitive paradigm shift within psychology. Researchers such as Shavelson and Stern (1981) and Peterson and Clark (1978) examined the interactive nature of teacher decision making within the context of the classroom and investigated the role of teacher thought in how teachers organized and conducted instructional activities. Research on interactive decision making included the examination of how teachers perceived and monitored student behavior, and how their plans were modified when student behavior was perceived as undesirable. Interactive decision making was seen as directly affecting teacher behavior and placed

teacher thought as the central causal agent of activity and management in the classroom.

Shavelson and Stern's (1981) model described teacher decision making as the process of integrating knowledge of content, students, and the instructional context to monitor and respond to events in the classroom. Their model implied that classroom management occurs throughout the instructional process and that it is both proactive and reactive in nature. Although later research has depicted teacher thought as even more complex in nature (cf. Calderhead, 1996), the general conclusion from earlier research remains: Teaching is a cognitively challenging process in which teachers are continuously required to make decisions about their instructional and classroom management.

One branch of research on teacher cognition has investigated teacher expertise, usually contrasting the actions and reflections of expert teachers with that of novices. Although the focus of most of these studies primarily has been on instruction, rather than on classroom management, the use of methodologies such as classroom observation (e.g., Leinhardt & Greeno, 1986) and stimulated recall (Peterson & Clark, 1978) also has captured expert teachers' reflections about their classroom management and organization. Pedagogical knowledge of classroom management appears to constitute an essential part of the domain knowledge that expert teachers possess. In contrast, novices appear to be less assured in the specificity and depth of their knowledge about classroom management (Carter, Cushing, Sabers, Stein, & Berliner, 1988).

One of the areas in which expert teachers exhibit more knowledge and skill is the smooth and effective orchestration of their classroom routines and activities. Research on effective classroom managers has established that they spend substantial time and care in establishing and teaching classroom routines and procedures to their students. Novices, in contrast, do not seem to have sufficient ability to use expert-like routines and frequently conduct disorganized lessons (Livingston & Borko, 1989). Berliner (1988) suggested that expert knowledge of routines such as conducting homework reviews, taking attendance, and introducing a lesson, be taught directly to novice teachers.

Although expert teachers have well-rehearsed routines that they use in their classrooms, they are also flexible in how they respond to new events that occur in the classroom, and they make instructional decisions in response to these changing factors (Westerman, 1991). Novices, in contrast, tend to teach lessons that are constricted by the plans and objectives that they set for that particular lesson. Livingston and Borko (1989) found that novices had difficulty deviating from scripted lesson plans, which made their instruction vulnerable to student questions and disruptions. Westerman (1991) reported similar rigidity in the classroom instruction of student teachers. A novice teacher in her study reported that she did not want to change the task she had assigned her group of restless students: "... as I had my lesson plan and I just

wanted to get to every part of it and get it finished” (p. 298). Shulman (1987) suggested that this type of inflexibility may be a result of a lack of necessary content knowledge, which limits the ability of the novice to adjust to changing demands in the management of students.

Novices voice more concern about their ability to use management and discipline procedures than do experts (Berliner, 1987). However, during stimulated recall, experienced teachers report a larger percentage of management decisions than do novices during instruction (e.g., Housner & Griffey, 1985). Stough, Palmer, and Leyva (1998) observed that although expert teachers appeared to give little attention to student behavior during classroom observations, in subsequent stimulated recall sessions they frequently referred to the preventive and anticipatory measures that they had taken to avoid behavior and management problems. In contrast, the concern that novices expressed about classroom management was more reactive.

Affective Features of Management

Teaching is full of emotion. Personal histories (cf. Carter & Doyle, 1996) of teachers frequently contain emotional content, and professional writing by teachers sometimes focuses specifically on the topic of emotion and its management. Early research on teacher emotions focused on teaching anxiety and, relatedly, teacher concerns (Keavney & Sinclair, 1978). Much of this research addressed causes and correlates of teacher anxiety, such as discipline and time demands. Some links were found between higher anxiety and lower levels of rapport and job satisfaction. Negative emotion associated with teaching is often related to student behavior, especially when this behavior is disruptive and inappropriate. Teachers report student aggression and behavior that interrupts class activities to be the most common stressors, with anger and depression being typical emotional reactions (Blase, 1986). Schonfeld (1992) found that beginning teachers in school environments that contained higher perceived levels of student behaviors such as threats or confrontations, and that included chronic stressors such as unmotivated students or overcrowded classes, experienced more depressive symptoms than beginning teachers in less stressful settings. A longitudinal study of teacher burnout in the Netherlands (Brouwers & Tomic, 2000) found that depersonalization and feelings of a lack of accomplishment (associated with burnout) were preceded by low efficacy beliefs in classroom management, and emotional exhaustion led to lower efficacy in classroom management.

Attributions teachers make about the basis for student behavior provides some insight into the causes of teacher emotions. Teachers are likely to feel anger and to endorse punitive or rejecting strategies when student misbehavior is seen as intentional and controllable (Brophy & McCaslin, 1992). Teachers also tend to respond with anger or frustra-

tion when they perceive that students fail because of a lack of effort, but they feel pity when they attribute failure to low ability (Stough, Palmer, & Leyva, 1998; Weiner & Graham, 1984). Teachers feel pride when students succeed through effort, but feel guilt when students give up (Prawat, Byers, & Anderson, 1983). One study (Emmer, 1994) reported that middle school teachers' negative emotionality was more intense in response to behavior problems than to poor student performance. The probable reason for the difference was that teachers believed that the misbehaviors were more controllable, whereas the bases for poor student performance were attributable to multiple sources and were viewed as less controllable by the teacher.

Naturalistic studies of teachers identify emotions as a key influence on teachers' interpretations of their own and their students' actions and on teachers' subsequent instructional and managerial strategies. For example, Hargreaves and Tucker (1991) analyzed the emotional response of guilt in teachers, illustrating its causes and consequences. They concluded that guilt results from conflicts among several factors: teachers' commitment to nurture children, the ambiguity inherent in determining teachers' effects on their students, increasing demands for accountability, and unrealistically high expectations. If not managed properly, the consequences of guilt are resentment, burnout, and cynicism. Escaping guilt traps, according to Hargreaves and Tucker, requires achieving a realistic balance of the various demands, receiving collaborative support from colleagues, and easing accountability pressures. Stough and Emmer (1998) found that beginning teachers whose students reacted with hostility during test feedback activities experienced negative emotions such as frustration and anger. Subsequently, some teachers altered their classroom management strategies by adopting highly structured feedback approaches to control student interactions, even though these strategies greatly limited opportunities for discussion and the teachers had earlier indicated that they believed discussion would help students gain a deeper comprehension of the content.

We believe that relations among teacher emotion, classroom management, and teaching practice are important to understand and need additional research. The effects of teacher emotion on burnout, teacher decision making, and behavior make the topic appropriate for inclusion in the teacher education curriculum. In addition to educational psychology content on child and adolescent emotional development, for example, curricular activities focused on teachers' acquiring an understanding of their reactions to student behavior, and of the coping processes they use to manage it, would be useful.

THE INFLUENCE OF CONTEXT ON CLASSROOM MANAGEMENT

Many types of teaching contexts are possible to identify, with important implications for management. Teaching contexts

may vary according to instructional goals, subject matter taught, grade or age and other student characteristics, use of technology, and so forth. For example, school and classroom settings having students from predominately lower or working class backgrounds are more challenging because students have been found to be less inclined to cooperate with teachers (Metz, 1993). Classrooms whose students have emotional or behavior disorders may require a combination of high levels of structure, teacher caring, and curricular adaptation (Cambone, 1994). Some management concepts and propositions, however, seem to transcend most contexts and thus may be regarded as general. For example, Kounin's (1970) concept of withitness would appear to be important in any teaching context.

Although there are many contexts that might cause some variation in management characteristics, we consider two contexts that are sufficiently widespread to warrant special attention to their implications for classroom management: the inclusion classroom and cooperative learning activities.

The Inclusion Context

The Individuals with Disabilities Education Act of 1990 mandates that students with disabilities be provided an appropriate education in the least restrictive environment, which, for most students, is the general education classroom. Although there is controversy about the inclusive education movement, general classroom teachers are increasingly placed in inclusive classrooms that contain students with a wide range of instructional needs (Tomlinson et al., 1997). In addition to challenges faced by the general educator in teaching students with special needs, special educators now play an expanded role, providing classroom instruction, consulting or coteaching with other educators, coordinating educational services with other health and human service agencies, and monitoring related services, such as speech therapy. These changes, as a consequence, will influence the management competencies required of both general educators and special educators.

There are few studies on the management strategies of teachers who instruct inclusive classrooms, and most of them highlight the limitations that teachers exhibit in this area. For example, McIntosh (1994) reported that during whole-class instruction, teachers make few adaptations to meet the individual learning needs of special education students. Teachers appear to lack the training and background required to effectively instruct students with disabilities. A 1992 survey conducted by Schumm and Vaughn (1992) found that although 98% of general educators rated their knowledge and skills in planning for general education students as "excellent" or "good," only 39% gave a high rating to their planning for special education students. Teachers also express a high level of concern with behavioral problems occurring while instructing students with special needs (Blanton, Blanton, & Cross, 1993; Hanrahan, Goodman, & Rapagna, 1990), but research on the

effective management of these behaviors within the context of the inclusive classroom is lacking.

Noting that many students with special needs seem to require direct instruction of appropriate behaviors, some researchers (Carpenter & McKee-Higgins, 1996; Colvin, Kameenui, & Sugai, 1993) suggested what they term an *instructional approach* to behavior management. In this approach, the focus is on directly instructing students in appropriate behaviors and responses to classroom situations and activities. Similarly, other research (e.g., Rademacher, Schumaker, & Deshler, 1996) suggested that teachers improve the quality and level of challenge of assignments given to students with mild disabilities to increase student engagement—and thereby decrease off-task and disruptive behaviors. These interventions are not novel approaches to classroom management, rather they promote classic techniques such as developing classroom rules, establishing routines and procedures, and raising the academic expectations of students.

Applied behavior analysis is also used to manage specific behaviors of students. Educational psychologists long have had a love-hate relation with applied behavior analysis. On the one hand, for many years, it was one of the few areas in psychology that could directly address the beginning teacher's concerns about discipline. Well into the 70s, it was the primary source for classroom management content in educational psychology texts. On the other hand, many educational psychologists have found fault with using extrinsic reinforcement in classrooms, and the behaviorists' limited concern for the role of cognition has swum against the philosophic current in recent decades. The emphasis on preventive management strategies also has deflected attention from the management of specific problem behaviors. Teachers, however, may need to implement individualized discipline plans for some included students, and the use of behavior analysis to assist in management through the control of antecedents and consequences may be a necessary component in the management of individual students who do not respond to traditional group-based instructional techniques.

A significant recent advance in applied behavior analysis has been the refinement of functional analysis, which attempts to examine systematically a problem behavior's function as well as the motivation for the behavior (e.g., Mace, Lalli, & Lalli, 1991; O'Neill et al., 1997). Through examining the environmental factors that evoke and maintain problem behaviors, the "function" or motivation of a targeted behavior is determined and the intervention or instructional accommodation is subsequently designed. Single-case research designs allow for the empirical analysis of these individualized treatments.

Although group-based management strategies are likely to remain a mainstay in the preparation of teachers, educational psychologists should expand their repertoire to adequately prepare regular teachers to deal with the unique challenges of students with disabilities.

Cooperative Learning Activities

Cooperative learning groups are another context which may require modification of recommended management strategies. Some common elements of the various cooperative learning models can be identified: group goals or task interdependence, some form of individual accountability, and good group interaction. Numerous literature reviews and metaanalyses support the use of cooperative groups on a variety of academic tasks (e.g., Qin, Johnson, & Johnson, 1995, for evidence on problem solving). Compared to formats that require students to “sit and watch” or that rely extensively on individual seatwork activities, group formats offer greater potential for participation, feedback, and interactive construction of meaning. The instructional model underlying traditional teacher-paced activities is one of “transmission of knowledge,” whereas the premise for cooperative learning programs is social construction of understanding and participation in a learning community (Brophy, 1999). Several classroom researchers (Cohen, 1994; Freiberg, 1999) noted the potential for inconsistency between the instructional goals and methods of cooperative learning and teacher-centered management systems. Attempts to adhere to strict limits, for example, on student talk and movement during instructional activities, would be counter to the need for discussion and group investigation that many cooperative activities require. Some traditional management functions are likely to continue to be relevant, with appropriate modifications: for example, monitoring students in groups, establishing classroom routines, and teaching desirable group behaviors. Some new management skills also may be needed, such as keeping students accountable for individual work in a group context, helping students learn to seek explanations from and to give feedback to other students, or pacing groups working at different rates or different tasks. Some forms of cooperative learning utilize multiple types of grouping arrangements and emphasize affective outcomes as well as academic outcomes (Johnson & Johnson, 1999), thus increasing the complexity of management. Most teachers who adopt cooperative learning do shift their role from director to facilitator of student learning (Antil, Jenkins, Wayne, & Vadasy, 1998), although some teachers prefer to retain considerable control over the structure of these classroom activities (Emmer & Gerwels, 1998).

When cooperative learning groups are used, teachers continue to be active managers, but the focus shifts to helping students learn the behaviors necessary to work effectively in groups whose goal is the active construction of meaning. It is important to realize that most classrooms that utilize cooperative learning will continue to use a combination of formats for instruction, not just the grouping of students. Consequently, the task of learning about management is more complex for the novice teacher who is beginning to use these new formats while mastering traditional ones.

CLASSROOM MANAGEMENT AND TEACHER EDUCATION

Classroom management research by educational psychologists has contributed substantially to our understanding of effective classroom practice. This body of research, moreover, along with other classroom-based research, has increased the relevance of educational psychology for teacher education and teacher educators. The emphasis in this body of research on careful observation, description, and measurement has helped produce results that can be translated into effective action plans for teachers. Increased availability of knowledge about classrooms has resulted in more applicable content for teacher education. Twenty to 30 years ago very little research-based information about management, other than that extracted from applied behavior analysis, could be found in basic educational psychology textbooks. Books devoted to classroom management were nonexistent. Currently, most texts in educational psychology contain a chapter or two that present basic concepts, many of which provide a solid conceptual overview (e.g., Borich & Tombari, 1997; Good & Brophy, 1997; Woolfolk, 1998), and there are many management texts from which to choose. Thus, students whose teacher education programs include a survey course in educational psychology will have had at least an introduction to the declarative knowledge in the field. In addition, according to a survey by Wesley and Vocke (1992, cited in Jones, 1996), in a solid minority of teacher education programs (37%), students take a course in classroom management.

The Development of Classroom Management Knowledge

As with other aspects of teaching expertise, the development of classroom management understanding and skill is likely to be a staged process, acquired over many years (Berliner, 1988), and be characterized by discontinuities, especially as the teacher encounters new teaching contexts (Bullough & Baughman, 1995; Cambone, 1994). In addition, beginning teachers' perspectives on classrooms are often incomplete and idiosyncratic, and rapidly reorganize their pedagogical knowledge during student teaching (Jones & Vesilund, 1996). Knowledge of effective classroom management should therefore include adequate conceptualization (Brophy, 1999; Doyle, 1990), rather than being learned as discrete concepts and skills, and should give developing teachers a research-based heuristic for examining and formulating their views on management. Neither should this knowledge be separated from practice, as it has been found that didactic components, separated from the situations in which they have application, are not very effective in teacher education (Wideen, Mayer-Smith, & Moon, 1998). Developing understanding about classroom management thus requires experience in classroom contexts to be pragmatic; that is, to be

integrated into the network of scripts, expectations, and routines that the teacher will utilize in the classroom and to result in the effective management of students.

Methods that promote the reflective-practitioner approach to teacher education attempt to situate classroom management within real-world contexts and events. Videotapes of classroom management situations may illustrate varied contexts and provide opportunities for analysis. Alternate forms of teaching classroom management skills and increasing management self-efficacy have included microcomputer simulations (e.g., Murphy, Kauffman, & Strang; 1987) and video-aided programs (e.g., Hagen, Gutkin, Wilson, & Oats, 1998; Overbaugh, 1995). The use of cases in teacher education has been rediscovered as a means of providing varied contexts and opportunities for constructing understanding about teaching and about management (Meserth, 1996; Shulman, 1986). Case-based instruction also has the advantage of providing novice teachers with rich, contextualized descriptions of classrooms and behavioral problems, while eliminating some of the complexity and immediacy of the classroom that can create difficulties for novice learning (Sykes & Bird, 1992).

An increasingly popular design for incorporating early field experiences and coordinating its components with teacher education curriculum is the Professional Development School (PDS) model. Increased exposure to classrooms and students in the PDS model also increases the encounters that novice teachers have with classroom management. Components that make use of classroom experiences such as journal writing, reflective activities, and portfolios can enhance classroom management competence in the field-based PDS, in addition to those mentioned previously. Because PDS students are usually in a cohort, taking the same classes and teaching in the same schools, this context can also provide a supportive teacher network or community (Lieberman, 2000) that is organized around learning how to teach and how to manage classrooms.

SUMMARY

Smith and Rivera (1995) pointed out that as classrooms become more diverse in nature, the need for classroom management techniques that can be used with both individuals and groups of students becomes more critical. Educational psychology has contributed substantially to the research base for this important area of pedagogical content knowledge and practice. Research on teacher thinking and on affective aspects of management has deepened our awareness of the challenging and complex nature of teaching's managerial dimensions. Varied teaching contexts, such as cooperative learning or inclusion settings, highlight the need for flexible and effective management skills. Educational psychologists can continue to contribute to the field of teacher education by incorporating relevant classroom management content into their

courses, by cooperating with teacher education colleagues to plan for managerial content across the curriculum, by including experiential components that take place in different classroom contexts and highlighting their managerial features, and by encouraging through reflection the construction of understanding about this crucial topic.

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