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Interdisciplinary Teacher Teams: 
Context, Design, and Process

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Teacher involvement strategies have become an important part of educational reform. Work group enhancement, although less used than individual approaches, is gaining attention in reform efforts and research investigations. Hackman and Oldham’s model on work group effectiveness provides a useful conceptual framework for understanding the nature of interdisciplinary teacher teams. This article reports on a study of interdisciplinary teacher teams during the 2nd year of implementation of teaming in a middle school. Based on observational and interview data, the study identifies the major context, design (structure), and process features of each of the four teams in the school. The article also provides a discussion of implications for practice and research in the area of collaborative teaching reforms.

Among the education reform and restructuring initiatives introduced in recent years, teacher involvement strategies are among the most popular (e.g., site-based management, participative decision making, and shared governance). One approach to teacher involvement is to change the design of the work to enhance teachers’ work and work outcomes (Mohrman & Lawler, 1992). Although individual job redesign and enhancement approaches were introduced during the 1980s to enrich teacher jobs (Hart, 1990; Smylie, 1992), they have had limited impact. Perhaps this limited impact occurs because only a small number of teachers benefit and because the strong norm of egalitarianism in schools discourages individual teacher recognition or distinction (Pounder, 1997; Troen & Boles, 1993).

A less used approach to teacher work redesign is work group enhancement (Kruse & Louis, 1997; Louis, Marks, & Kruse, 1994; Pounder, 1997, 1998b,
1998c, 1999; Quinn & Restine, 1996). Teacher work groups or teams are designed to create work interdependence and increased self-management, increasing members’ responsibility for the group’s performance and outcomes. Work group members tend to have greater control over a broader array of work issues and must develop interpersonal and group decision-making skills. The clearest example of this may be found in some middle schools in which teachers are organized into interdisciplinary grade-level teams that have decision-making responsibilities for the educational program of a particular subschool of students. These decisions may include curricular emphasis and coordination, student management and behavioral interventions, student class assignment and flexible grouping strategies, curricular and cocurricular scheduling, student assessment, coordinated parent communication, staffing decisions and assignments, or budgetary allocations.

Work group enhancement promises to tighten the connection between teachers’ work and student outcomes because work is organized around students rather than academic disciplines. This allows teachers greater comprehensive knowledge of and responsibility for student learning and outcomes (Pounder, 1999). This approach may be especially beneficial in secondary schools where teachers’ work and students’ educational experiences are often fractionalized with little coordination across subject areas and little knowledge and responsibility for comprehensive student learning (Boyer, 1983; Goodlad, 1984; Sizer, 1984). Also, work group enhancement has the benefit of involving all school educators in cooperative decision making and organizational change rather than a select few. Some suggest that educational teams hold the potential to “rebuild schools”—as long as they maintain the focus on pupils’ educational needs rather than auxiliary issues (Maeroff, 1993, p. 519).

In spite of the promises of work group enhancement, there are some potential pitfalls of collaborative work arrangements (Pounder, 1998a, 1998b). In a synthesis of collaboration issues addressed by multiple authors, Pounder (1998a) identified and discussed some of the dilemmas or tensions associated with collaboration such as (a) collaborative change versus the persistence of schools (especially with regard to instructional methods), (b) resource gains versus costs of collaboration, (c) professional interdependence versus norms of professional autonomy, and (d) shared influence versus shared accountability. These dilemmas or tensions may limit the viability and promise of some teaming efforts.

Smylie, Lazarus, and Brownlee-Conyers (1996), commenting on literature addressing teacher participation and involvement initiatives, criticized much of this literature for its atheoretical nature, its lack of empiricism, and
its lack of methodological rigor. Similarly, literature on teacher teams or other collaborative work arrangements is vulnerable to the same criticism. Especially absent from much of the literature on teams is a comprehensive theoretical framework.

Thus, the purpose of this article is to use a comprehensive theoretical model of effective work groups to (a) frame a discussion of relevant education literature on teacher teams and (b) organize the results of observation and interview data collected on teacher teams in one middle-level school. This study is not designed to test theory but to use theory as a guiding conceptual framework. This theoretical model for effective work groups is borrowed from business/industrial research literature (Hackman & Oldham, 1980). After reporting the study results, the article concludes with a discussion of findings and recommendations for future research.

**HACKMAN AND OLDHAM’S MODEL OF EFFECTIVE WORK GROUPS**

Hackman and Oldham’s (1980) work on job redesign may represent the most comprehensive conceptualization of effective work groups to date (see chapters 7 and 8, pp. 161-218). Before discussing the specific variables and relationships hypothesized in the model, it is important to understand how work group effectiveness is defined. Hackman and Oldham suggested that effective work groups are those (a) whose output “meets or exceeds organizational standards of quantity and quality,” (b) whose “members’ needs are more satisfied than frustrated,” and (c) “whose social process maintains or enhances the capability of members to work together on subsequent tasks”—that is, the group does not “burn itself up” (pp. 168-170).

They further specified that the group’s effectiveness is largely determined by intermediate effectiveness criteria—the level of effort; amount of knowledge, skill, or expertise; and the appropriateness of performance strategies applied to the group work. The relative salience of each intermediate criterion in determining the group’s effectiveness can vary depending on the work technology. That is, all three intermediate criteria may not be equally important in determining the group’s effectiveness for some types of work.

The model of effective work groups describes three factors—organizational context, design (structural) features, and interpersonal processes—that are antecedents to the intermediate effectiveness criteria (see Figure 1). Supportive organizational contexts include: (a) reward systems and control
mechanisms (or performance monitoring systems) that are based on group performance rather than individual performance in achieving group objectives, (b) available relevant training and technical consultation, and (c) clear work requirements and constraints. Design (structural) elements include: (a) the work characteristics of the group work or task, (b) the work group composition, and (c) the group norms about performance processes. Healthy interpersonal processes, those that increase “process gains” and reduce “process losses” (Hackman & Oldham, 1980, p. 200), include: (a) efficient coordination efforts and enhanced group commitment, (b) appropriate sharing and weighting of relevant knowledge and inputs from group members, and (c) implementation and invention of performance strategies.

This brief outline of work group concepts and relationships does not adequately cover the full range of scholarship and issues relevant to work group effectiveness. However, as Hackman (1990) suggested, work content is an important factor in influencing the character of work groups. Therefore, it is important to focus specifically on work groups in schools. How does the conceptual framework outlined earlier relate to literature on teacher teams in schools?

Figure 1: The Effectiveness of Self-Managing Work Groups: A Summary Model
TEACHER TEAMS IN SCHOOLS

There are several types of work groups or teams that may appear in schools. They include groups such as management teams or school advisory groups, special services teams, and interdisciplinary instructional teams. Of these, interdisciplinary instructional teams may hold greatest promise for substantive and significant school reform because unlike most other team or employee involvement strategies, they have all of the following characteristics: They (a) involve most school faculty, changing the nature of teacher work itself; (b) directly affect the instruction of all school students; and (c) establish a close and direct link between the restructuring effort and student/school outcomes (Pounder, 1998c).

Specifically, an interdisciplinary instructional team’s chief responsibilities are to (a) develop and implement interdisciplinary curriculum and teaching strategies based on the child’s developmental needs, (b) develop coordinated interventions and management strategies to address student learning and/or behavioral problems, and (c) provide coordinated communication with parents. (The latter two responsibilities often go hand in hand.) These are particularly powerful work group functions because the success of school restructuring efforts is limited unless schools organize in ways that are tied to the learners’ needs and the teaching-learning process (Rowan, 1990).

Interdisciplinary instructional teams appear largely in middle-level schools and emerged as a key component of the middle schools movement of the 1960s (Clark & Clark, 1994). The primary type of multidisciplinary team is composed of core academic teachers (e.g., language arts, social studies, math, science, and reading) who are responsible for the required academic instruction of a contained group of students (often 100 or more). Teachers of other subjects (e.g., electives, exploratories, physical education, etc.) may be integrated into these teams or form their own independent team. Professional support staff (e.g., guidance counselors, school psychologists, library and media specialists, special education teachers, reading specialists, or other learning specialists) may be integrated into specific teams or may serve as consultants to all teacher teams. School administrators typically serve in an advisory or consultant role to all teams.

We now turn to the application of Hackman and Oldham’s (1980) work group model to relevant literature on school interdisciplinary teams. That is, we will analyze the organizational context, design features (group structural elements), and interpersonal processes of school interdisciplinary instructional teams and report available research results on the nature and outcomes of these teacher work groups in schools.
Organizational Context

Hackman and Oldham’s (1980) model suggests that three organizational context variables are important to effective work groups: (a) rewards and objectives for good group performance (vs. individual performance), (b) available task-relevant training and consultation, and (c) clarity of task requirements and constraints.

Literature on interdisciplinary teacher teams makes little mention of monitoring or reward systems designed or modified to match the nature of group work (Pounder, 1998c). That is, performance monitoring and rewards within a school are seldom based on the attainment of team objectives. Furthermore, schools have notoriously limited reward systems.

Regarding training and consultation, interdisciplinary team literature particularly emphasizes the importance of professional development to improve such relevant work skills as interpersonal communication skills, group decision-making skills, effective meeting strategies, goal setting and evaluation, interdisciplinary instructional planning, and student development (Clark & Clark, 1994; Erb, 1995; Haimes, 1995; Wilkinson & Smith, 1995). Furthermore, because teams may go through several developmental stages (Garner, 1995; George, 1982; Pickler, 1987), their training and professional development needs may vary over time. Fully functioning teams may take 3 years or more to develop (Erb & Doda, 1989).

Ongoing consultation needs may also change over time, but among the most important is knowledge about the development of students (at a particular age range) and the implications for teaching and learning (Clark & Clark, 1994). Also, as teacher teams assume greater decision authority, they may need ongoing consultation about school and district policies, legal considerations regarding student management and instruction, or other typical administrative information (Crow, 1998).

Two issues regarding work requirements and constraints are addressed in the interdisciplinary team literature. First, this literature suggests that teams with designated leaders function better than leaderless groups (MacIver, 1990). Second, teaming teachers tend to exercise greater influence in school-wide decisions than nonteaming teachers (Erb, 1987, 1995). Thus, teachers may need a formally recognized team leader and a clear delineation of a team’s decision authority zone (and corresponding group accountability) relative to that of school or district administrative personnel (Pounder, 1998c).
Design Features

The design features of work groups are largely group structural elements including work characteristics, group composition, and group norms for performance processes (Hackman & Oldham, 1980). Of these structural elements, work characteristics have probably received the most research attention.

For example, recent survey research compared the work characteristics of middle-level teachers who worked in teams to teachers with a traditional individual job design (Pounder, 1999). Teachers working in teams reported that their work required significantly more skill variety and somewhat more work discretion (autonomy) and feedback from the work itself. Teaming teachers further reported significantly more knowledge of students’ academic and personal lives and more contact with parents than did the nonteaching teachers. Teaming teachers also reported somewhat more knowledge of other teachers’ work and more help and work coordination from others than did their nonteaching counterparts.

These results were largely consistent with other scholarship on the nature of interdisciplinary teamwork, although no other studies have studied the same specific work characteristic variables. Erb (1995) reported that teachers in teaming arrangements focus more collective attention and coordinated action on student learning and behavior. Also, teacher teams tend to systematically address student problems earlier, communicating earlier and more frequently with parents than teachers who work in isolation (Erb, 1987). Furthermore, when teacher teams observe similar performance problems among many students, they are more likely to revise management or teaching strategies, developing and reinforcing consistent team expectations and routines and rewarding appropriate behavior to reduce student management problems (Erb, 1995).

In addition, teaming teachers spend more time talking with others about curricular and cocurricular issues and, after working together for a year or more, have greater knowledge of the curriculum and instructional matters beyond the limits of their own content area (Erb, 1988, 1995). These teaming teachers also have greater autonomy and discretion in how they do their work than do their nonteaching counterparts—particularly greater discretion in grouping students for instruction and greater flexibility in scheduling instructional time (Erb, 1995; George & Oldaker, 1985). Teachers who work together for longer periods often integrate their instruction to the point of abandoning traditional subject areas for curriculum based on personal or social themes (Erb & Doda, 1989; Hawkins & Graham, 1994). However, some researchers have indicated that curricular coordination is one of the last
points of work integration achieved (Arhar, Johnston, & Markle, 1988; Beane, 1993; Lipsitz, 1984).

Much of the literature on the composition of interdisciplinary teams is prescriptive or normative rather than empirical. Because interdisciplinary teams most typically include one teacher from each of four or five subject areas (Clark & Clark, 1994), they are composed of teachers with diverse professional knowledge and disciplinary background by design. Furthermore, this typical composition limits their size, thus avoiding some of the communication and coordination complexities of excessively large groups or the overloading of excessively small groups (Seamon, 1981).

However, the group members’ interpersonal skills, teaching experience, philosophical and professional perspectives, and leadership skills may vary substantially, with some groups being highly homogeneous whereas others may be highly heterogeneous. These factors often receive only marginal consideration in deciding which teachers serve on which teams (Pounder, 1998c). Seamon (1981), citing Lifton (1972), concluded that “the best composition seems to be that of individuals who are somewhat different in attitudes, backgrounds, and experiences, but not radically different” (p. 45).

Hackman and Oldham (1980) also considered group norms about performance processes to be a structural variable. Although one does not usually think of group norms as structural features of groups, this theory suggests that group norms about performance strategies serve as an informal control mechanism—helping shape individual members’ behavior and reducing performance monitoring effort and time. It is difficult to assess how performance process norms are established or used to shape or monitor interdisciplinary teacher team behavior. Certainly teachers develop more knowledge of one another’s work performance and contributions to the team (Pounder, 1999) and thus have the potential for monitoring or shaping performance behavior. However, the authors were unable to find existing studies that suggest how the teacher team and its work norms influence others’ performance behaviors.

Interpersonal Processes

Hackman and Oldham’s (1980) attention to healthy interpersonal processes had an underlying objective of efficiency and effectiveness—that is, to reduce process losses and enhance process gains of the group. The three identified interpersonal processes were (a) coordinating efforts and fostering commitment, (b) weighting inputs and sharing knowledge, and (c) implementing and inventing performance strategies. Reducing coordination and communication costs is a prevalent theme in much of the interdisciplinary
team literature. For example, Clark and Clark (1994) identified such mechanisms as block scheduling of students, regularly scheduled time for team meetings, and shared instructional preparation time as critical elements to enhance coordination and communication among team members. Communication efforts can also be made more efficient with communication tools such as e-mail and common bulletin boards and calendars (Pounder, 1998c).

Literature on interdisciplinary teams suggests that team commitment may play an important role in the success of teaming efforts. Because teams represent a microcosm of the school and reduce the size and complexity of the school for students (Erb, 1995), some teams spend considerable time building team commitment and team identity for teachers and students (e.g., through team names, colors, mottos, group rewards and prizes, and other symbols).

Balancing member inputs is another important group process issue. Hackman (1990) argued that work groups that fail to achieve a balance of group inputs may suffer from the loss of appropriate member expertise and effort, resulting in a “self-fueling downward spiral.” Also, the group may “burn itself up” when contributing members grow weary of carrying a disproportionate amount of the group workload (Hackman, 1990). However, little attention has been given to these types of process losses in the literature on interdisciplinary teaming.

Similarly, little evidence was found concerning the degree to which interdisciplinary teams develop and implement new work strategies to meet the team’s work objectives. It could be argued that because interdisciplinary teacher teams tend to have greater influence on schoolwide decisions and greater discretion in how they conduct their instructional work (Clark & Clark, 1994), they are more likely to invent and implement new performance strategies than their nonteaming counterparts (e.g., new cross-disciplinary approaches to instruction and cocurricular activities or clubs that reinforce classroom teaching). However, because newly developed teams may not have models for how teamwork or interdisciplinary instruction may be handled, they may unduly limit their own opportunities for creative alternatives to traditional instructional approaches (Pounder, 1998c).

**Team-Related Outcomes**

A number of studies have identified some key teacher and student outcomes attributable to interdisciplinary teaming efforts. However, most studies have not established a clear link between the effectiveness of teacher
teams and specific student or faculty outcomes. That is, studies on teaming have not tended to microanalyze which elements of a team have contributed to group effectiveness and how group effectiveness influences teacher and student outcomes.

Pounder’s (1999) comparative study of teachers in teamed and nonteamed work arrangements revealed that teaming teachers reported significantly greater internal work motivation, growth satisfaction, general job satisfaction, work efficacy, and professional commitment than did their nonteaming counterparts. Results of other studies have revealed similar findings. For example, teaming teachers have been found to experience greater work satisfaction (Arhar et al., 1988), greater sense of professionalism (Lipsitz, 1984), more professional efficacy (Ashton & Webb, 1986; Doda, 1984), and less isolation (Erb, 1995) than do nonteaming teachers.

Student outcomes have also been addressed in some studies of interdisciplinary teacher teaming. These studies suggest that students at teaming schools have higher levels of social bonding with peers, teachers, and their schools (Arhar, 1990); report more satisfaction with their fellow students (Pounder, 1999); feel less anonymity and isolation (Clark & Clark, 1994); and have higher levels of self-concept (Stefanich, Wills, & Buss, 1991) than do their nonteaming student counterparts. Studies have also identified important outcomes in student achievement as a result of interdisciplinary teaming and other middle-level implementations. Specifically, empirical work by Felner and his coauthors (Felner et al., 1997) indicated that the greater the degree of middle-level reform (including teacher teaming): (a) the greater the student achievement on standardized test measures in reading, math, and language; (b) the more favorable teacher reports of student behavioral problems (i.e., aggression, moodiness/shyness, and learning difficulties); and (c) the better student self-reports of adjustment problems (i.e., worry, fear, and self-esteem). Not only did the analysis of the total student population data reveal these favorable results, but these same favorable outcomes also held true for low-achieving, high-risk student subpopulations. In addition, schools using teacher teams often report a significant reduction in disciplinary problems including fewer office referrals and student suspensions (George & Oldaker, 1985). This outcome is attributable to the effectiveness of teacher teams in developing coordinated student management strategies and collective action to address student behavior and learning problems.

The subsequent portion of this article describes the results of data collected on teacher teams in one middle school. Hackman and Oldham’s (1980) model of effective work groups is used as a framework for reporting study findings.
METHOD

This study uses a descriptive design to investigate teacher teams in one middle-level school setting. The study is not a theory testing investigation. The Hackman and Oldham model (1980), however, is used to guide the data collection and analysis of data regarding the work of these teams.

Setting

The study was conducted in a suburban middle-level (Grades 7 through 9) school and included 817 students and 34 faculty members in Grades 7 through 9. The student population of the school was predominately White (88.7%) and middle class (8% on free or reduced lunch). In addition, approximately 11% of the students did not attend the school during the previous year. These characteristics mirror the larger community as well.

The school chosen for this study was in its 2nd year of the implementation of work group enhancement using grade-level faculty teams. This school was chosen for several reasons. The school was included in another study (Pounder, 1999) comparing teaming and nonteaming schools in the same district. To keep district level variables constant, a small district with only two middle-level schools was chosen. There are a limited number of middle-level schools in the state using this form of work group enhancement. The authors also wanted to focus on a teaming arrangement in its early stage of development. For these reasons, the school’s teams do not necessarily represent all types of grade-level faculty teams, and these teaming arrangements are not offered as normative of how teams should be designed.

The principal, who was a proponent of middle-level school reform, initiated the teaming arrangement. The principal worked primarily through an ad hoc teachers’ committee that supported the use of teaming and other middle-level school reforms in the school such as advisories, intramural sports, cocurricular activities, and interdisciplinary instruction. These reforms are typical of the strategies identified in the literature as representative of exemplary middle-level schools (MacIver, 1990; National Middle School Association [NMSA], 1995). The principal facilitated year-long professional development to introduce teaming to the faculty before its actual implementation. During this professional development year, faculty visited other schools that were involved in teaming and took learning style inventories to assess their strengths and interests. Teachers self-selected which grade level team they wished to join based on the awareness activities from the professional development experiences. Problems regarding these team choices
were resolved through negotiation with a teacher committee, the principal, and the individual teacher.

The principal also worked with the teachers and central administration to negotiate an early release time to arrange for weekly team meetings (80 minutes each). The district office did not mandate teams or other middle-level reforms but was supportive of the initiation of teams in this school. Although there was resistance from some teachers to the teaming concept, most teachers were willing to participate in the reform. The principal, a key change agent for middle-level reform in the school, regularly attended team meetings but was not affiliated with any single team. He viewed these as teacher teams and only became involved if he thought teams were off track in making any progress.

Teams were organized by grade level (seventh-, eighth-, and ninth-grade teams) and included teachers from core disciplines (e.g., English, science, and math) as well as teachers from exploratory disciplines (e.g., art, music, physical education, and foreign language). This resulted in initial grade-level team sizes of approximately 12 members each, which are larger than typical middle-level school teaming arrangements. Originally three teams (by grade level) were created. The eighth-grade team later divided into two smaller groups of approximately 6 members each.

Data Collection

Data collection began with observations of weekly team meetings of all four teams for 8 to 10 weeks by two researchers. The researchers attended separate meetings. The team meetings lasted approximately 1 to 1.25 hours. Following this period of observations, face-to-face individual interviews were conducted with 19 team members (6 from the seventh-grade team, 3 from eighth-grade Team A, 4 from eighth-grade Team B, and 6 from the ninth-grade team). Teachers from both core and exploratory disciplines were interviewed. Participation in the interview phase was voluntary. Interviews lasted approximately 50 minutes and were typically held at the school site during the teacher’s preparation period. The principal, assistant principal, and two guidance counselors were also interviewed.

The observations used an open-ended narrative format broadly focusing on team member interaction during the team meetings. The interviews followed a semistructured format based on questions arising directly from the observation findings and questions arising more loosely from components of the Hackman and Oldham (1980) model. The interview focused on individuals’ attitudes and perceptions of teaming and of the specific work team and descriptions of how teaming has affected the individual’s work (see the appendix).
Data Analysis

Observation and interview data were analyzed first in terms of a content analysis of major patterns and themes. Individual team members’ views regarding team processes were compared with those of other members of the same team to check for convergent and divergent themes. Following this, brief team descriptions were written that identified demographic characteristics and general team processes. Next, data were analyzed in terms of the key variables of the Hackman and Oldham (1980) model. Matrixes were developed with the Hackman and Oldham variables and the four teams to again identify convergent and divergent themes among team members. At both analysis steps, observation data were used to round out interview data and to check for completeness of the information from the interviews. These steps in the analysis process allowed the authors to create more complete team pictures that are reflected in the organization of the team descriptions found in the Results section. These descriptions begin with a summary of general team characteristics, identification of influences on group effectiveness, and an assessment of the team’s effectiveness based on observation and interview data.

RESULTS

The Results section is organized by teams. Within these sections, the authors present a brief description of the demographic characteristics of the team. Following this description, findings are presented regarding the influences on the team’s effectiveness. This presentation is organized according to the elements of the Hackman and Oldham (1980) model including organizational context, structural/design features, and interpersonal processes. At the end of each team section, findings regarding the team’s effectiveness are presented.

Seventh-Grade Team

Demographic Description

The seventh-grade team is composed of proportionately younger, less experienced teachers than the other teams. The team is large and the turnover has been considerable. Interviews with team members and observations of team meetings suggest that this group has yet to focus on a particular component of the teaming charge. The leaders during the 1st year refused to be
reelected to a 2nd year, and other team members who were potential leaders refused to take on the job because they believed few people were contributing to the team’s work. These individuals perceive that the shirkers outnumber the workers. Those who were leaders the 1st year and the 2nd year leader who was finally convinced to take the job are more junior team members. They also tend to be more deferent of the principal’s authority and thus less independent in decision making.

Influences on Group Effectiveness

Organizational context. Seventh-grade team members identify three major types of organizational constraints that affect their team’s effectiveness. First and foremost is the absence of block scheduling. Because block scheduling is essential for interdisciplinary teaming to occur and seventh-grade students are not block scheduled, effective teaming in developing interdisciplinary curriculum and student intervention strategies is difficult to achieve. “I think my biggest hang-up is we’re not scheduled so that we can do it [interdisciplinary curriculum]. . . . We would love to do more, and it’s not that we don’t want to, we really can’t.”

The second organizational constraint mentioned by team members is the principal. But, opinions vary in terms of the principal’s help or hindrance in teaming. An outspoken critic of the principal argues that the principal has failed to provide support and communication. This critic argues that the principal, by being overcontrolling, has not allowed teams to focus on school-wide problems. Other team members are more positive about the principal and applaud his enthusiasm and energy.

A third constraint is unique to the seventh-grade team but is influenced by the organization. Several team members commented on the large number of discipline problems encountered by the team early in the year. They maintain that this slowed the teaming process by focusing attention on negative problems that had to be solved quickly.

I think one of the reasons why our team has had such a slow start this year is because we had such horrendous discipline problems that we were spending 90% of our time figuring out what to do with the kids. We didn’t have time to figure out the lesson.

Design features. The seventh-grade team focused on student intervention rather than interdisciplinary curriculum. They like the way teaming is designed so that teachers can work with each other, thus reducing a single teacher’s responsibility to do everything. Although exposing curriculum to others’
feedback can be threatening, the team members like the way this allows for
new ideas. However, they do not like the reduced autonomy and complain
about how some content areas do not integrate well with others.

Team members also mention group composition features. The need for
relevant expertise in leadership, group dynamics, and teaching are apparent
in interviews and observations. Team members complain about having to
share ideas with those they do not respect and with those who do not feel the
need to work together, for example, on at-risk student problems. Elective
teachers also are hesitant to make suggestions when they are not in a position
to implement them. “I feel like it’s unfair for me to vote because I’m not going
to have to do any of that work.” Team members also comment that the large
team size provides the opportunity for everyone to have a part to play, but it
also allows some members to shirk responsibility.

Interpersonal processes. Team members reserve some of their strongest
comments for interpersonal processes and it is evident from both interview
and observation data that these processes are a major hindrance to the team’s
effectiveness. The team’s leadership problem is heightened by the lack of
members who are willing to lead or who have the team’s acceptance to be-
come leaders. These coordination issues are reinforced by a resistance to
teaming. Team members estimate that only a small number are committed to
the teaming idea.

The lack of leadership for fostering coordination and commitment is
influenced by and influences the uneven participation among the group.
Because some do not buy into the teaming idea, they have been reluctant to
share responsibility and thus others have had to shoulder all the tasks and
have become burned out. One of the previous year’s leaders described her
feelings this way: “When we ask for volunteers they [resistant team mem-
bers] don’t volunteer. So we drop the project entirely because nobody wants
to do it. . . . I decided early on that I wasn’t going to pull it for everybody.”

Observations of team meetings found similar evidence of uneven partici-
pation in the team. Only 3 or 4 teachers out of 10 made suggestions, followed
by silence from other team members. At a team meeting, 1 teacher sat at her
desk and conducted personal business and 2 other teachers who sat in the
back of the room had to be coaxed to join the group.

Team Effectiveness

Although several team members mentioned positive teaming outcomes
such as greater parent involvement, fewer discipline problems referred to the
administration, and interdisciplinary curriculum, there were concerns about
the outcomes of teaming. Some argued that the discussion of student discipline issues focused on the negative without reaching consensus on how to resolve these problems. “I don’t think right now that they [student intervention discussions] are real effective. . . . I think the follow-through is not always as good as it should be.”

Team members’ assessments are mixed regarding whether their needs were more likely to be satisfied than frustrated. Team members are unsure whether the costs and benefits of teaming are balanced. “I don’t know if everybody sees the advantages outweighing the disadvantages of extra work, extra time, and having to share ideas with people that you may or may not respect professionally or like their personality.” Also, the uneven participation has led some to conclude that teaming is effective but not efficient.

Some team members perceive less isolation and say they spend more time communicating and airing differences. But, there are also indications that this is, in the words of 1 team member, “a group of individuals rather than a team. You can be alone in a group.” Even those team members who believe they are less isolated from their team members nevertheless feel they are not integrated with the rest of the school.

Eighth-Grade Team A

Demographic Description

The eighth grade began with one larger team then split in half when 3 core teachers wanted to focus more on interdisciplinary curriculum development than student intervention issues. They and 2 additional teachers formed Team B (described later), whereas the remainder of the eighth-grade teachers remained on Team A. Tension between the two groups remains. The two teams meet together periodically to coordinate eighth-grade activities. In an observation of one of these joint meetings, the two teams spent 30 minutes bogged down with coordination/communication problems regarding the alignment of advisory groups and teams. Team A is made up almost exclusively of female teachers who are at middle to late stages in their careers.

Influences on Team Effectiveness

Organizational context. Eighth-grade Team A members identify two organizational context features that influence their team’s effectiveness. First, the lack of block scheduling constrains the teaming process and their effectiveness in implementing it. However, this team is far less vocal in their com-
ments about block scheduling than the seventh-grade team members. Perhaps because there is little focus on the interdisciplinary curriculum component of teaming, they feel less constrained by the absence of block scheduling.

The second feature of organizational context is the principal’s view of the team and his educational philosophy. Some team members perceive that the principal is not pleased with Team A’s progress and some oppose his philosophy of midlevel education.

I think with his [principal’s] fantasy of midlevel [education] here at the school, I don’t know if it will ever be what he wants. . . . I really think a school has to tailor it to their population. . . . So some of the things . . . that other schools might need in a more lower income, gang related area, where they have to do more nurturing, we don’t have to do that here.

Team members largely believe that the continuation of teaming depends on the principal staying at the school, although they acknowledge that the district appears to support teaming.

**Design features.** The focus of Team A is clearly on student intervention. Observation data of their team meetings provide ample evidence of this emphasis and the major reason for the split in the team lies in this fact. The other eighth-grade team preferred to work on interdisciplinary curriculum development.

The salience of this focus is also evident in members’ views of autonomy within the teaming design. Both opponents and proponents of teaming acknowledge the importance that autonomy has for team members and how interdisciplinary curriculum development is perceived to reduce that autonomy. One opponent of teaming for interdisciplinary curriculum states that she dislikes it because “I’m not convinced about interdisciplinary curriculum, and maybe part of that is because I like to do my own thing.” Another team member acknowledges that the perception of diminished autonomy has lessened this year. Team members feel now they can say no in terms of working on interdisciplinary projects.

Some team members feel that interdisciplinary curriculum projects frequently require an artificial integration of content areas, especially math and science.

So much of interdisciplinary stuff is a real stretch, and when it’s artificial I don’t think it’s good. So when you can get things that mesh and do them together then that’s good teaching, good learning. . . . But to pretend that they mesh, I don’t think it’s valid.
The splitting of the eighth-grade team focuses these team members’ attention on particular team composition issues that are relevant to their group’s effectiveness. They emphasize the need for team members to be flexible and point to the rigidity of particular members of the other eighth-grade team.

I think three people run that team and I think they do what they want and I think if you are an elective class [teacher] you either do what they want or you have no opinion, and I’m not willing to work that way, I’m not going to have somebody come and say to me we want you to do this.

Most Team A members feel that their team is open and communicates well. In addition, they point to the value of a small team to even out participation and acknowledge that the original team’s size led to the difficulty in getting people to work together.

Two clearly identifiable group norms may affect the team’s performance. First, team members are reluctant to see change as needed. A team member describes some teachers’ attitudes as the following:

Don’t rock the boat, because my life is good at this point and so I don’t need to change just for the sake of change. . . . I’ve been in this profession for x amount of years and I’ve seen fads come and go so quickly, this is just another thing.

This affects their focus on student intervention and their reluctance to try interdisciplinary curriculum development. Second, they contrast themselves with the other eighth-grade team by avoiding bragging about their accomplishments. “We may not be as enthusiastic or show boat or grandiose, but we’ve been able to incorporate it and help out. I think we’ve worked together as a unit.”

Interpersonal processes. The interpersonal processes of this team are not as problematic as that of the seventh-grade team. Few coordination problems are apparent, which is probably due to the team’s lack of emphasis on the curriculum component, which necessitates much greater coordination than the student intervention component.

More even participation is also evident in the team. However, when it comes to those interdisciplinary curriculum efforts that have been mandated, team members admit that “some people in our team do just what they have to get by” and some are getting burned out. During observations of team meetings, seldom did any team member explicitly volunteer to follow up on something the team mentioned or decided.
Team Effectiveness

Team A members view student intervention as the primary outcome of teaming and believe that it has been very effective. Their effectiveness criteria include teachers’ ability to reach consensus about a child’s problems and their joint intervention with parents. Observation data demonstrate a slightly different picture. Although the team meetings focus almost exclusively on students, the quality of that discussion does not consistently emphasize problem solving but is more similar to a faculty lounge conversation for venting frustrations. Family information is shared, but team members sometimes do not develop a strategy for addressing student issues.

Team A members are much less likely to say interdisciplinary curriculum efforts have had positive outcomes. They say they like to do their own thing and not all subjects seem to integrate well in interdisciplinary units. “When it comes right down to the basics, students are learning today and they learned ten years ago.”

When the authors examine whether teaming satisfies teachers’ needs, the costs and benefits again involve student intervention and interdisciplinary curriculum components. “The personal time that I put into a project would be the cost. The benefits? I think there are good benefits as far as knowing how the kids . . . knowing what’s going on across the board.” They also find it easier to talk with parents because they can meet with individual parents during their weekly team meeting.

The third feature of team effectiveness, capability of working together, is demonstrated again by their comments that they can reach consensus on student issues so that more than one teacher is urging intervention.

When it was individual teachers it was one voice, you know, “I have this problem but I don’t have any support,” and now it’s “our team has discussed this and we feel this way.” So it’s not just me against the world anymore.

They believe this has increased their authority with students and parents.

Eighth-Grade Team B

Demographic Description

The second eighth-grade team was created when 3 younger energetic team members (and 2 additional teachers) split from Team A to focus on interdisciplinary curriculum development. Their focus on the curricular component has been intense. In contrast, their student intervention work as a team has
been slight. They argue that they prefer to deal with their individual student problems alone but are willing to consult with each other if necessary. This appears to occur during a common preparation period. They feel that the other eighth-grade team was overly consumed with student discipline issues and tended to focus on the negative.

Influences on Team Effectiveness

Organizational context. Eighth-grade Team B members believe that neither administrators nor other teachers in the school provide the support needed to do effective teaming. Their comments about teachers on other teams relate both to the passive nature of the large majority that neither supports nor opposes teaming and the active criticism that some teachers have made regarding these Team B members’ intense involvement in interdisciplinary curriculum projects.

It’s really hard when you don’t have the support that you need to have...and when you don’t hear or see that from the faculty, from the administration, from the district, then you kind of wonder what it is you are trying to do.

Some team members express reluctance to go into the teachers’ lounge because of the hostility they experience from other teachers.

These team members are more likely than their counterparts to emphasize the need for training and consultation in interdisciplinary teaming and personal relationships. They also point to the importance of better communication on the focus of the interdisciplinary component.

It’s not units, it’s a way of teaching, and that’s the problem. It needs to be a way of teaching, not little pieces of teaching, and that’s what it is, it’s piecemeal, and people don’t understand that. It just hasn’t been communicated enough.

Similar to members of other teams, they mention the absence of block scheduling as an organizational constraint. They say this influences their effectiveness in interdisciplinary curriculum efforts because some students who are involved in the curriculum project are not simultaneously taking courses that are foundational to the unit. The absence of block scheduling also prevents all students being together at one time for special activities. This causes friction with elective course faculty when team members ask to take students out of these classes for field trips.

Other constraints include insufficient time to meet and plan (one team meeting per week); the school’s structure, which is middle school in name
only; entrenched veteran teachers who oppose teaming; and the slow pace at which teaming has been accepted and implemented. This last constraint, they believe, is created by the lack of clarity and focus provided by the administration.

**Design features.** Team members identify three major task features that they applaud but that also create difficulties: task identity, autonomy, and dealing with others. Observation data suggest that team meetings are oriented around curricular tasks. Interpersonal issues or student problems are rarely discussed at team meetings. But, team members acknowledge that this focus on curriculum is not without its costs. Some of the team leaders are beginning to realize how interdisciplinary curriculum affects their interest in their own subjects.

I’m a science teacher, I enjoy teaching science, and that’s part of one of the things I’m struggling with. [During this curriculum unit] I’m a Civil War teacher, and my whole teaching structure, my dumb green socks, my notebooks, my labs, the way I teach, I can’t do that for six weeks.

Also, they argue that the task of interdisciplinary curriculum is unclear in that units are unintegrated; they start, stop, and discussion may not continue.

Team B members acknowledge that although teaming has permitted them as a group to do what they believe is important, it also has the risk of reducing their individual autonomy.

On the autonomy . . . there have been times where I’ve felt I’m losing . . . One of the reasons I think I’m a teacher, one of the many, is that I like to do what I want to do . . . kind of like being your own boss.

Although they acknowledge how teaming reduces their isolation and provides the opportunity to know what other teachers are doing, they recognize difficulties in dealing with others. Implementing interdisciplinary curriculum necessitates opening up their curriculum to others and at times trading classes.

I’ve always felt comfortable with my curriculum, but there are certain parts that are weaker than others, and when you’ve got to lay it out for your peers, who I consider all good teachers . . . you better be good . . . If you actually do what I call real interdisciplinary coordinated curriculum . . . you are going to be wide open, and everybody is going to see.
This team’s comments on the heightened risk of dealing with others may help researchers understand why other teams have been reluctant to implement the interdisciplinary curriculum component of teaming and have been more responsive to the student intervention component.

A design feature that seems to allow Team B members, in spite of these risks, to focus on interdisciplinary curriculum in their teaming is the team’s composition. Four factors of team composition are reflected in their comments. First, Team B members believe that all teachers on their team have relevant teaching expertise. They have all taught about the same amount of time, are midcareer teachers, have fairly dynamic curricula, and are always interested in experimenting with their teaching. “I think the most important thing is that we respect each other as teachers, and I think that would be a really big thing, if I was on a team with a teacher that I really didn’t respect.”

The team members also feel that they have certain interpersonal and leadership skills that permit them to function as a team. “All three of us [core teachers] are fairly assertive, so nobody gets pushed around, and I think that’s really good, and we are all willing to give and take.” Team meetings sometimes involved contentious disagreements among these Team B members, for example, over the feeling that students with behavioral problems were getting dumped on one teacher. Yet in spite of this, team members were able to carry on discussions and reach consensus on major projects to undertake.

Also, the team’s composition involves a balance of homogeneity and heterogeneity. Whereas all core teachers on the team like to do interdisciplinary curriculum and have similar philosophies of teaching, they are different in terms of pace of change, creativity, and interest in big versus smaller projects.

Finally, they argue that the fact that they are a small team allows the core teachers to work closer and to reach agreement. Their approach consists of the core teachers doing the planning and telling the elective teachers how they can contribute.

In addition to the task design and their team composition, team members hold group norms that influence their performance. They believe that student intervention is primarily best done alone rather than in a group but are willing to seek support from others if needed. They obviously believe that interdisciplinary curriculum is the way to affect student learning. They also have norms that reflect their progressiveness. Referring to a disagreement between Team A and Team B over aligning advisory groups and teams, 1 Team B member says,
They didn’t see that more as a thing that would benefit kids, they saw it as more a thing that we just wanted to do. . . . They should agree on that [kids come first] anyway. That’s why you go into teaching, and if you’re not you shouldn’t be here.

Interpersonal processes. Most coordination issues mentioned by team members involve relationships with faculty of other teams. There appear to be two reasons for these coordination problems. First, 1 Team B member tends to “step on toes, and he’s stepped on some toes over the years, and we all step on some toes sooner or later, but he squishes them.” Second, members of other teams have less commitment to the curricular component of teaming and tend to get their feelings hurt when coordination requests are made. When Team B teachers asked if students could be taken out of some classes to participate in an activity, teachers on Team A who had those students were offended.

Inside the team, elective teachers appear to defer to core teachers. One elective teacher says, “The [core] teachers plan and I kind of fit into their plan, which is okay.” But, she remarks that in her previous school where teaming existed, she had more input.

On the whole, the participation of core teachers is fairly even, although the math teacher’s students are not block scheduled and she tends not to be as involved in planning as the other 3 teachers. She also says she has less interest in the interdisciplinary projects but feels that students, in particular the at-risk ones, benefit from teaming.

Team Effectiveness

Team members’ assessments of teaming outcomes follow, not surprisingly, from their focus. They believe interdisciplinary curriculum development is valuable and student intervention is not really an advantage of teaming; they already have good relationships with their students. They also express some failures of the interdisciplinary component of teaming. Although students like the units, those who are not block scheduled do not have a clear picture of how everything fits together.

It’s a little frustrating when you look at some really good kids that don’t have me [the history teacher] as a teacher. So they are going to get the Civil War unit, but they aren’t going to get what we consider the framework. The cornerstone is history for this unit.
In terms of their own needs and satisfaction, these team members seem to be wearing thin. They mention time, stress level, difficulty in blending their particular subject interest into the units, risk involved in opening up their curriculum and teaching, and criticism from other teachers outside the team.

I’m struggling with the fact that I feel like I’ve overcommitted myself and I’m not sure I want to do it anymore. . . . I love being a teacher; I can’t imagine being anything else. . . . I find that I’m starting to not enjoy it as much as I have in the past. So I’m going to probably try and back off a little bit so I’m not the main target to throw rocks at anymore.

In spite of these costs, they feel comfortable for the most part within their team and are open to each other. They believe that teaming has reduced isolation; they cannot go into their classrooms, shut the door, and do their own thing anymore. However, they feel that teaming has reduced collegiality across teams. Although they know their team members better, they know members of other teams less well. One team member notes the similarities between her experience on this team and an earlier teaming experience at a different school.

You just knew the people that you were working with very, very well, much better than you’d ever known anybody before, but my contact was cut off from everybody else because it’s so time consuming. You don’t have time to socialize or to meet with other people.

Ninth-Grade Team

Demographic Description

The ninth-grade team is a large team composed of older teachers and some of the most experienced teachers in the school. There appears to be a great deal of homogeneity in attitudes among team members. They like to teach ninth graders and view ninth grade as the beginning of high school.

Descriptions by team members in the interviews as well as some observational data characterize the team as assertive, individualistic, decisive, autonomous, and politically independent. They tend to be more politically shrewd and are influential in school decisions. Several members of this team serve on the School Wide Advisory Group (SWAG), which is the school’s shared decision-making unit.
Influences on Team Effectiveness

Organizational context. Ninth-grade team members identify several features of the organizational context that influence their team effectiveness. Two features please them: opportunity to meet as a group and initial assignment to this team. They praise the principal for putting “the right people together.” They also compliment the year-long in-service training on lesson plans and interdisciplinary learning that occurred prior to the 1st year of implementation but feel that later training was not as useful.

Most comments in regard to organizational context focus on four major constraints. First, although they like the common planning time each week, they believe it is insufficient to accomplish everything required of them. “You’ve got to coordinate your planning schedule, or your testing and your major projects. You have to interview with any child of the 300 whatever ninth graders.”

Second, they feel that the school administration constrains their team’s effectiveness by breeding competition among teams, refusing to acknowledge the need for a departmental emphasis as well as the interdisciplinary approach, and initiating too many new projects at once.

We took on a lot too soon. . . . We went to full inclusion, we went to midlevel education, we went to Wednesday meetings. We did everything so fast and all together. I believe that our teachers got really burned out really fast.

Third, some teachers believe that teacher negativism, especially among veteran teachers, has reduced the team’s effectiveness. “Some of these teachers have been here for 20, 25 years, and they’ve seen every change possible, because it seems to go in a circle. So they are just, ‘Yeah, this is just another program.’”

Finally, they mention the constraining effects of the lack of block scheduling. However, ninth-grade team members seem to be less concerned about block scheduling than members of other teams.

Design features. Task identity and autonomy influence their team effectiveness. Team members clearly prefer and value the student intervention component of teaming. They believe that meeting together to discuss student problems lessens their isolation, increases their confidence in working with students and parents, allows them to “gang up” on students who are having problems, and permits parents to see that their children are having problems
with more than one teacher. Observations found evidence that ninth-grade
team meetings are very focused and very efficient in terms of student inter-
ventions. Team members are able to reach closure—with a specific plan of
action for each student and a teacher responsible for follow-through.

Ninth-grade team members are less enthusiastic about the interdiscipli-
nary component of teaming. They believe it results in insufficient content
rigor. “Last year we [math teachers] spent two days on it [interdisciplinary
curriculum unit] and never got the kids back. . . . It just totally ruined the
whole structure of the class.”

Although interdisciplinary curriculum units were mandated, these team
members have managed to respond in ways that protect their autonomy to do
what they feel is more important and to do what they would be doing anyway
in their classrooms.

The word comes down and we say “Okay this is bite the bullet time” and do
what we have to do. . . . We get it over with and then we go on and we do what-
ever it is that we want to do anyway.

In addition to the design of the group task, the team’s composition affects
its effectiveness. Team members have relevant expertise in two areas. First,
they have experience teaching ninth graders, feel that ninth graders are high
schoolers, and enjoy teaching this age group. Second, they have more teach-
ing experience in the school than teachers on other teams. Observation data
reflect this in the team’s discussion of students. Each problem student has at
least one teacher who knows the student’s situation personally and informs
the group of relevant family information. Their expertise gives them the
grounds to be more independent, more assertive, and more politically shrewd
than their younger counterparts on other teams.

In addition to teaching expertise, they have interpersonal skills that permit
them to get along with each other. “I think the thing that happened with our
team that was established almost from the beginning . . . we agree to disagree,
and maybe that’s why we haven’t had lots of frustrations and hard discus-
sions.” Although team meetings are formal, with motions and votes, there are
ample occasions of joking, good humor, and teasing among team members.

The team members seem to like the fact that their team is large. This
allows each of them to have all ninth graders instead of the students being dis-
tributed among several teams. This also reinforces the team’s homogeneity.

This homogeneity is most obvious in comments that reflect group norms
about group members’ work with ninth-grade students. Their approach to
student intervention is based on a like-minded view of their role in preparing students to enter high school and to gain a realistic view of the work world. They criticize both the principal and members of other teams as being too soft on kids, nurturing them, and not holding high academic and behavioral expectations.

You send them out into the world and the first time they are stabbed in the back by someone climbing over them up that corporate ladder . . . who are you going to blame for this poor kid going into therapy for the rest of his life because he doesn’t understand why doesn’t everybody love me? Everybody has always loved me.

“They can’t add fractions . . . but they remember that they sure always had fun in math . . . Well, while you were having fun you didn’t get an education.”

Interpersonal processes. In terms of coordination, the ninth-grade team seems to work well together. Yet, tools that might enhance their coordination, such as use of the computer network, go underused. One team member remarks, “You have to turn on the computer to get your mail.”

The ninth-grade team members are committed to teaming in terms of student intervention. Their approach to the interdisciplinary curriculum component of teaming is to do it with the least amount of inconvenience. They admit that if the principal left, “we would want to continue the teaming. I mean seriously, because that really has just been remarkable. Now as far as the interdisciplinary curriculum and stuff I don’t know if we would continue that.”

Of the four teams, this team’s participation is probably the most even. Perhaps because they work well together, have similar norms, and have worked out an arrangement that doesn’t inconvenience anyone, most members feel the workload is shared. Observations indicate that there is very even volunteering in the team. No real prodding is needed to get volunteers.

There is indication, however, that some electives teachers are not as pleased with the arrangement as core teachers. Some elective teachers feel that core teachers leave them out.

We have had some problems with our academic teachers seeing the validity in elective classes . . . the attitude [that] those classes are there but they are filler, they aren’t real important in the overall education of the kid.

Others feel that elective teachers are more likely to be involved in interdisciplinary curriculum units than the core teachers. They perceive that the core
teachers are willing to go along with the ideas but “do as little as possible to get by.”

**Team Effectiveness**

A ninth-grade teacher assesses (with apologies to Charles Dickens) the team’s effectiveness: “It was the best of times; it was the worst of times.” Ninth-grade team members describe the positives of the student intervention component and the negatives of the interdisciplinary curriculum component. They believe that teaming around student intervention has resulted in more coordinated efforts that demonstrate to students and to parents that the student’s problem(s) must be taken seriously.

There are kids who really that’s all they needed was just a little push. They needed to have us sit them down and say “Ok this is how we feel about stuff,” and also it’s been nicer . . . if a parent comes in they get to see that . . . if their child is having problems it’s not just one teacher.

Although they admit the students enjoy the interdisciplinary units, they feel the real outcomes are either nonexistent or negative. Some say the interdisciplinary teaming has not resulted in anything that teachers would not be doing anyway. They argue that most of the projects are done purely for public relations purposes.

You have to show people that you are doing something so that they think you are. . . . [Discussing a big project], I mean it takes a month, and for what they get out of it, I mean I don’t think it’s worth all that time.

Others say the effect is more negative.

When that kid leaves me and goes to the high school and they don’t have the math background that they need, how do we explain to them well that we were involved with the Renaissance unit. . . . That doesn’t hold any weight when a kid has to take an ACT test and just simply doesn’t have the information.

When they discuss to what degree teaming has satisfied their own needs, once again they are positive about student intervention and negative about curricular components. They enjoy getting together to talk about students. They feel this camaraderie builds their confidence and helps them realize that others have problems with students. Yet, they argue that interdisciplinary
special projects are not real teaching. “Why I went into teaching was because I wanted to teach. If I wanted to do special projects I would have gone into art design or special programs.”

The ninth-grade team believes that there is more collegiality among its members. Within the team, there is greater communication and cohesion. Yet, they perceive a reduced collegiality across teams in the school. In fact, they perceive competitiveness and divisiveness and believe this is caused by the principal.

Summary

The previous descriptions of the four teams can be summarized in terms of the key findings regarding organizational context, design, interpersonal processes, and team effectiveness. Table 1 presents these findings.

DISCUSSION

This Discussion section is organized in terms of the three specific work group elements based on the Hackman and Oldham (1980) model and three general issues that cut across these elements. In the first case, the authors will discuss the most salient work group elements relating to organizational context, design features, and interpersonal processes. In the second case, the authors make additional general observations related to (a) the developmental and evolutionary nature of work groups; (b) the underlying relationships between and among some of the structural, contextual, and interpersonal process variables of effective work groups; and (c) the relation of teaming to student learning.

Organizational Context

First, several organizational context or organizational support variables seemed to be critical for these teams. The lack of complete block scheduling repeatedly hampered the coordination efforts, planning and decision options, and effectiveness of the teams. The limited block scheduling also adversely influenced some of the structural or design elements such as autonomy or discretion in instructional scheduling and group size.

The organizational context features that were most salient primarily had to do with the principal. His efforts in negotiating support with the district office for weekly release time for planning were recognized and appreciated by teachers. Also, the professional development that the principal instituted
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during the year preceding the actual implementation of teaming was important. However, the principal was criticized for the absence of continuing organizational supports in these two areas. Additional planning time and ongoing professional development were needed by most teams as they passed through certain stages of growth or wrestled particularly with interpersonal process issues—such as coordination problems, leadership problems, imbalance of member participation, commitment problems, and so on. In addition, teachers felt that his leadership would have been more effective if he had not introduced so many changes at once (referring to other schoolwide program changes) and if he had not made comments comparing teams. Teachers were very uncomfortable with any influences that encouraged competition among the teams.

Design Elements

Second, one of the most salient design (structural) elements that emerged was the task emphasis of the teams. The teacher teams were much more likely to put emphasis on and find value in the group work that addressed student behavioral or learning problems than on interdisciplinary curricular planning. Only one team preferred to spend its shared time largely on curricular work. This preference may reflect teachers’ sense that the benefit from increased information and effectiveness with students outweighs the cost of collaborating. This finding may also be a reflection of the lack of goal clarity and definition regarding curricular coordination on some of the teams (Larson & LaFasto, 1989). Or, this finding may reflect the early developmental stage of these teams. Several studies have indicated that curricular coordination is one of the last points of work integration achieved (Arhar et al., 1988; Beane, 1993; Lipsitz, 1984), especially among secondary school teachers (Clark & Clark, 1994). Fully functioning teams may take 3 years or more to develop (Erb & Doda, 1989), going through several stages that move from emphasis on team management issues to increased cooperative teaching and curricular integration (Erb, 1995; Stout, 1998).

Teachers focused particularly on two design issues in teamwork—decreased isolation and decreased work autonomy or discretion. Many teachers enjoyed the reduction in isolation that teaming had brought to their work. However, many were conscious of some loss of autonomy or discretion due to the collaborative nature of their teamwork. This finding is both consistent and inconsistent with previous studies. Little (1990), for example, found that teachers who experienced strong collegial relations also had greater work interdependence and less isolation. These factors lead to a greater sense of
collective enterprise—working to achieve common goals for student learning (Darling-Hammond & Snyder, 1992).

The literature on teacher participation in decision making is also informative in understanding these findings regarding isolation and autonomy. In one of the better studies in this literature, Smylie et al. (1996) found that although teacher participation in decision making is positively related to perceived teacher accountability and opportunities for teacher learning, it is negatively related to individual teacher autonomy. In other studies, it is quite common for teaming teachers to report a reduction in work isolation, but most also report an increase in work autonomy or discretion due to the flexibility in instructional scheduling that teams can exercise (Erb, 1995; George & Oldaker, 1985; Kruse & Louis, 1997). However, this study’s teachers did not have this scheduling flexibility because they were not completely block scheduled. Thus, they did not experience increased group autonomy but rather experienced decreased individual autonomy due to decision compromises and coordination required by teaming.

Several work group composition factors seemed to influence the teamwork and reinforce previous normative literature in this area. First, team size was an issue. Except for the ninth-grade team members, who were comfortable with their large team, most team members preferred smaller group sizes (approximately 5 to 6 members) versus larger group sizes (10 members or more). Smaller group sizes could have significantly reduced the complexity of coordination and planning if block scheduling had been completely in place.

Team homogeneity—especially homogeneity of educational philosophy—was a significant factor in team dynamics. Groups with greater homogeneity of philosophy and perhaps career stage (e.g., the ninth-grade team and the eighth-grade Team B) seemed to move forward more easily in their planning, consensus building, decision making, coordination, and shared activities.

Several types of expertise appear important to effective teacher teams—interpersonal skills and flexibility, leadership expertise, and teaching experience. Teachers value, appreciate, and desire team members who are flexible and have good interpersonal skills. The teams that exercised the greatest leadership, independence, and autonomy were those that had strong leaders and a significant amount of member experience as teachers working in that particular school setting and in other team settings. These types of experience gave the teams expertise on how things are done, the implications of this or that decision, and the confidence to try new ways of doing their work (assuming they had commitment to the change).

For the most part, teams did not establish strong norms of independence in their decision making or how they chose to do their work or attain their goals.
This finding is probably explained by the early stage of development of these teams. The teaming experience was new enough that the teams seemed not to fully realize the discretion that they could exercise as a group—indeed, of the principal or typical work norms.

Interpersonal Processes

Lastly, at the stage the authors completed data collection, interpersonal process issues were probably those that most needed attention on some teams. The most salient of these were coordination problems, imbalance of member inputs and participation, and uneven commitment of members. The most consuming process loss or cost of teaming was the effort required for teachers to coordinate their work. This coordination problem was clearly complicated by the inadequate block scheduling discussed earlier. Also, tools for coordination (e.g., electronic mail) were underused or inadequately explored. The imbalance of member inputs was most problematic with the seventh-grade team—although some evidence of specific types of imbalance was present on other teams. Imbalance in inputs may be attributed to both individual and structural causes. Factors that seemed to influence the degree of participation or input of teachers were (a) the degree of commitment for teaming, (b) whether the teacher taught a core subject or an elective subject, and (c) whether the content of a teacher’s subject area integrated naturally with other subject areas involved in curricular coordination. The lack of commitment by some team members was probably the process variable that would be most difficult to address and yet had greatest impact on the team interpersonal processes. However, Hackman (1990), in his recommendations for managing work groups, suggested this: “Establish specific and appropriate group structural features, because effective group structure tends to develop healthy group processes. Structural considerations include motivating work responsibilities, appropriate group composition, and clear and explicit specification of the team’s authority and accountability” (p. 503).

General Issues

In addition to the most salient work group elements that affected teaming in this study, three more general issues are significant. First, factors that are critical to the success of teaming may cut across the three areas of the Hackman and Oldham (1980) model. The organizational constraint of the absence of block scheduling, for example, affects work design and interpersonal processes. Block scheduling allows teams to exercise greater flexibility and
autonomy in instructional planning and scheduling, can allow smaller team sizes, and can reduce some coordination costs or process losses.

Teacher assignment to teams also cuts across organizational context, design, and interpersonal processes. In addition to creating teams with members who have sufficient professional development, principals must be aware of the design and interpersonal issues that arise as a result of these assignments. Each team should have sufficient members with leadership skills, interpersonal skills, and experience in the school and/or with teams to provide adequate expertise for the team to be effective. Another important consideration is team size. A team that is too large can increase coordination and communication costs to a dysfunctional degree. Likewise, a team that is too small may have inadequate expertise or resources to enhance student learning experiences or other desired teaming outcomes. The authors’ observations suggest that elective subject teachers (e.g., art, music, industrial arts, and physical education) may be more appropriately placed on their own separate team(s) rather than on teams with the core academic grade-level teachers (e.g., English, math, science, and social studies). This team composition keeps the team smaller and more easily puts teachers together who serve the same body of students and whose subject areas lend more naturally to curricular integration. Also, the issues of team homogeneity versus heterogeneity in educational philosophy, stage of career, commitment to teaming, or other key variables must be considered. Some heterogeneity in team composition is desirable to enrich team decision making and team growth. However, teams that are too disparate may create group inertia, unhealthy conflict, participation imbalance, or other interpersonal process losses.

The second general issue is the developmental and evolutionary nature of teacher work groups. This is most evident in the type of task emphasized by the groups. Three of the four teams emphasized student intervention rather than interdisciplinary curriculum features of teaming. Although this finding seems consistent with literature on teams (Arhar et al., 1988; Beane, 1993; Clark & Clark, 1994; Lipsitz, 1984), the question arises as to how to support the developmental nature of teacher work groups. The authors suggest that ongoing professional development is essential if teams are to change and to reach their potential. Most teams need further training and development within 2 years after the initial development to address group interpersonal process issues. For example, teams may need advisement on how to reduce coordination and communications costs including using tools such as electronic mail and shared electronic files for student information, parent correspondence, and instructional, meeting, and testing schedules. Similarly, professional development may be necessary to help teams focus more on
curricular coordination and integration versus management tasks and student intervention. In particular, teams will probably need help learning how, when, or whether to integrate content areas that have proven challenging to coordinate with others. The authors’ observations suggest that math and sometimes science teachers may be more resistant than teachers of other disciplines to curricular integration due to their adherence to sequential learning and skill development. Elective areas such as art, music, industrial arts, and others may offer another set of challenges in interdisciplinary curricular planning. Also, teams may need help exploring and creating extracurricular and cocurricular activities to reinforce classroom instruction.

The third general issue involves the relation of teaming to student learning. Although this study did not examine student learning, the study has implications that may affect teaching and learning. Teaming can engender a sense of collective responsibility, which has been shown to have a positive relationship with students’ engagement and academic achievement (Lee & Smith, 1996). However, one persistent area that is slow to change is teachers’ instructional methods (Stout, 1998). If teachers’ instructional methods do not change along with work group enhancement, little impact on student outcomes may be seen.

RECOMMENDATIONS FOR FUTURE RESEARCH

These findings suggest that longitudinal research on teams should be pursued to reveal how factors affecting team dynamics and team effectiveness change through the stages of team growth or with different career stages of teachers. Formal and informal leadership processes within the teams should also be studied to more fully understand how to best enhance the team’s effectiveness. The administrator’s role deserves greater attention to understand specifically which structural/design elements, organizational context, and interpersonal processes she or he can best influence to enhance team effectiveness.

Because these qualitative results are reasonably consistent with elements of Hackman and Oldham’s (1980) model, research specifically testing the model with a larger sample should be conducted. Moreover, research that tests the model using multiple levels of analysis may better explain how teaming affects outcomes for the individual teachers in a team, the team itself, and the school as a whole.
APPENDIX

Semistructured Interview Questions

1. What do you think of the team approach at your school?
2. How has the team design influenced the way you do your work? What do you do the same as (or different than) you did under the previous individual job approach?
3. Do you see any difference in the effectiveness of your work efforts with the team design versus the traditional individual job approach? Explain.
4. How has the team design influenced your work attitudes and behaviors?
5. How effective do you think your team is at accomplishing its goals? Why or why not?
6. How are your views similar to (or different from) others in your team?

NOTES

1. For the purposes of this article, the terms work group or team are used interchangeably, although some authors (see, for example, Restine, 1996) have made arguments for conceptual differences in these terms.

2. Group work may hold greater potential for meaningful change in secondary schools than in elementary schools for the following reasons. First, most elementary teachers already have the advantage of knowing and teaching “the whole child” across multiple curricular areas and developmental activities. They also have contact with students for significant blocks of time and can exercise greater flexibility in scheduling instructional time than secondary teachers who are locked in 45- to 50-minute class periods. Home-school communication is simpler because it typically involves only one teacher communicating with a child’s parents. Also, because elementary students are largely taught in self-contained classrooms, the focus is more typically on the child rather than on separate and often disjointed curricular areas. By contrast, traditional secondary schools with their focus on curricular specialization may create disjointed educational experiences for students who feel disengaged from their multiple teachers and the school environment. Parents may experience secondary schools as complex environments where home-school communication is complicated and random at best, providing little coordinated information about their child or his or her educational experiences. Thus, interdisciplinary teams may hold greater promise for meaningful and substantial change in secondary schools than in elementary schools.

3. For a more complete analysis of Hackman and Oldham’s (1980) model with respect to teacher teams, see Pounder (1998c).

4. Literature on work groups also uses terms such as self-managing work groups, task-oriented work groups, or self-determining work groups.

5. For a more complete explanation of the purposes and nature of these different types of teams, see Pounder (1998c).

6. For example, Erb (1995) recommended that the ideal group size is “within the range of two to eight” (p. 193) members.
7. For example, teachers in the middle school in which one author served conducted a mock presidential election during a regular presidential election year. Students auditioned to role-play each of the Democratic and Republican presidential and vice presidential candidates by writing and giving a speech to their English class group. After the candidate actors and their respective running mates were selected, team students attended a “political rally” and “debate” in which candidates gave their campaign speeches to the team and students asked relevant political questions derived from their social studies course work. Selected students also assumed the roles of recognized television journalists to conduct postdebate candidate interviews and commentary that were aired on the within-school television network. Also, the school offered cocurricular clubs—such as a journalism club that wrote a regular student newsletter, an arts club that painted colorful murals in the hallways, and a music club that formed a small jazz band and mixed vocal quartet.

8. Although the school still retained the title of junior high, it was in early implementation stages of a typical middle school model.

REFERENCES


Troen, V., & Boles, K. (1993, November 3). Teacher leadership: How to make it more than a catch phrase. Education Week, 13(9), 27-29.