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ABSTRACT

This paper examines the relationships among administrative support, interdisciplinary team functioning, classroom practices, and student outcomes. It is premised on the need to move beyond examinations of the team process and explore the effects of processes on student learning. The report is based on a systemic research project that studied 60 certified personnel in 12 team configurations, each team containing one principal and one assistant principal. The teams were comprised of nine interdisciplinary teams and three special teams. The school in the study--a high-performing, low-SES restructured middle school--contained 756 students, 77 percent of whom were eligible for free or reduced lunch. Data sources included questionnaires, school-comparison data, school documents, interviews, public report cards, and team lesson plans. The results provided compelling evidence that supportive administrative practices and high-team functioning influence classroom practices, which in turn leads to more favorable student outcomes. However, the focus on team process alone was not sufficient to affect classroom practices and teacher behaviors; all subsystems needed to work together to increase student learning. The study identified specific relationships among school practices associated with higher student achievement, and underscored the importance of the systemic approach to understanding, integrating, and coordinating all subsystems that affect student outcomes. (Contains 18 references.) (RJM)

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Beyond the Process of Teaming: Administrative Support, Classroom Practices, and Student Learning

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Abstract

The goal of the study was to investigate the relationships among administrative practices, team functioning, classroom practices, and student outcomes using a systemic approach. Situated in a high-performing, low SES restructured middle school, the participants were 60 certified personnel in 12 team configurations with one principal and one assistant principal. The public school site housed grades 6-8, with approximately 756 students; seventy-seven percent (77%) of the students were eligible to receive free or reduced lunch. Data sources included questionnaires, school comparison data, school documents, interviews, public report cards, and team lesson plans. Findings provided compelling evidence that effective administrative practices and high team functioning both impact classroom practice which in turn affect student outcomes. The study identified specific relationships among school practices associated with higher student achievement. The importance of the systemic approach to understanding, integrating, and coordinating all subsystems impacting student outcomes was underscored.

Beyond the Process of Teaming: Administrative Support, Classroom Practices, and Student Learning

(A) Purpose:

The goal of the study was to investigate the relationships among administrative support, interdisciplinary team functioning, classroom practices, and student outcomes. Whereas the past decades of middle level reform have addressed the *process* of implementing interdisciplinary teams of teachers, current pressures of accountability prompt a need to move beyond team process *per se* and to look at their effect on classroom practices and ultimately on student learning. Similar to the decreasing emphasis on an "input" approach to teaching (Darling-Hammond, 1998), team analysis likewise has reached a state of development, calling for an understanding of the linkages among administrative support, team functioning, classroom practices, and student outcomes.

(B) Theoretical Framework

General system theory (Bertalanffy, 1968) provides the conceptual framework for integrating the components of this study. Better known in the field of organizational theory as "contingency theory," the perspective conceives of the organization as sets of interacting subsystems, with interdependent relations among the subsystems and the environment (Morgan, 1986). Senge (1990) applied systems thinking to learning organizations and integrated the individual and team into the larger picture of the organizations through shared vision, mental models, team learning, and personal mastery. Ilgen (1999) called attention to teams in organizational contexts and pointed out the limitations of previous narrow frameworks for research in small groups, arguing that the complexities of team research, i.e., dynamic change and structural complexity, call for consideration of the numerous levels of team functioning and outcomes through multiple methods and a portfolio type model of overall team research. In this study, the components of context, inputs, process, and outputs, are framed within classic systems theory (McGrath, 1984) and Hackman (1987). The school represents the focal system, with the administration, the teaching/learning function, and the interdisciplinary teams as subsystems in a collegial environment. Relationships between administrative practices and team functioning affect classroom practices; classroom practices affect student outcomes with feedback loops to administrative support and team functioning (see Figure 1).

[Insert Figure 1 about here]

(C) Methods:

Participants. The school site contains grades 6-8, with a total enrollment of approximately 756 students, 68.5% Black, 25.4% White, 1.1% Hispanic, 3.6 % Asian, 0.1% American Indian, and 1.3% Multi-racial. Seventy-seven percent (77%) of the students are eligible to receive free or reduced lunch. The Georgia Council for School Performance grouped the school in Cluster 7, with Cluster 8 being the lowest SES grouping of schools in Georgia and Cluster 1 having the highest SES households. The school is a Performing Arts and Communication Technology Magnet School, with 40% of the student body having auditioned for the Performing Arts Program and were accepted. The curriculum includes specialized magnet courses in art, music, technology, dance, drama, and foreign language.

There are 60 certified personnel in 12 team configurations, comprised of 9 interdisciplinary teams and 3 special teams. The teams averaged around 5 individuals per team with a range 2- member teams to 7- member teams. An interdisciplinary team is defined as "a way

of organizing the faculty so that a group of teachers share: the responsibility for planning,-teaching, and evaluating curriculum and instruction in more than one academic area; the same group of students; the same schedule; the same area of the building" (Alexander & George, 1981). The administration consisted of one principal, one assistant principal, and one counselor.

Procedures. Team meetings are held during the daily 50-minute common planning time (teachers also have an individual planning period) during which time they plan instruction, schedule events, guide and counsel students with special needs, and have parent conferences. Instruction is planned by the team with an exploratory teacher in art, music, drama, or careers working directly with academic teachers. Each team plans for interdisciplinary instruction using a school-wide team planning form that provides space for state curricular objectives, unifying theme, subject area activities, culminating event, and evaluation of learning. Teachers do not submit individual lesson plans.

(D) Data sources. Seven broad categories of data sources provided data related to the following four components of the study. Figure 2 illustrates the data collection matrix and positions the data sources as they relate to administrative support, team functioning, classroom practices, and student outcomes.

(A) Administrative support. School records related to staff development, discipline, attendance, achievement, and fund allocations; student handbook; Student Success Plan (Waterbrook, 1996); school success indicators (Waterbrook & Moore, 1998); school-wide Title 1 planning map; Title 1 Final Evaluation Report, structured interviews with the administration and team leaders and coded for similar themes; Georgia Public Education Report Card (1996-1997) for school demographics; School Performance Reports by the Georgia Council for School Improvement for grouping (cluster) of similar schools according to socio-economic status (SES) of the student body.

(B) Team Functioning. Teachers responded to the *Team Process Inventory* (Trimble, 1995), a 30-item self-report measure, targeting human factors (e.g., group process and team beliefs) and task factors (e.g., team tasks as instruction and guidance). Anchors were 6=always, 5=often, 4= always, 3=occasionally, 2=seldom, and 1=never. Teachers indicated their perceived degree of teacher participation on each item. Examples of items included participating in team decision-making, discussing team goals, bringing closure to items, having parent conferences as a team, trying out innovative ways of teaching, and impacting classroom practices. Alpha reliability coefficients were .85 (group process); .85 for team beliefs, and .74 (team tasks). Other data sources included school reports related to field trips, referrals, parent conferences, and performances; team plans for 31 weeks of the AY1997-1998 school year, coded by topic of thematic unit, scope of subject integration (i.e., the number of subject areas contributing to the unit), and student products (i.e., number and type); structured interviews with the administration and team leaders, coded for similar themes (e.g., procedures, topics of thematic units, discipline procedures, and implementation of team plans).

(C) Classroom Practices. The extent of the implementation of team plans related to instruction (i.e., field trips, student products, performances, and culminating events), student management (i.e., homework, written work, absences, discipline) and guidance (i.e., number of referrals, parental contacts as a team, and events for student recognition)

(D) Student Outcomes.- Using The Iowa Test of Basic Skills (ITBS) as reported by the Georgia Public School Report Card (1996-1997), the Title 1 Final Evaluation Report (1997-1998), and the classification of schools by SES levels according to the Georgia Council for School Improvement, student outcomes were analyzed at two levels (a) within-school achievement trends over three years and, (b) between-school comparisons of trends and achievement.

[Insert Figure 2 about here]

Data Analysis: The analysis of data was guided by the following question: What were the factors that influenced these interactions: administrative supportive factors and team functioning, administrative support and classroom practices, team functioning and classroom practices, classroom practices and student outcomes. To organize the data we used a matrix of the four components (administrative support, team functioning, classroom practices, and products) by method (see Figure 2). The matrix evolved from the original multitrait-multimethod matrix developed by Campbell and Fiske (1959) and adapted for team analysis (Trimble & Peterson, 1998). Relationships among the four components were organized using the model depicted in Figure 2.

(E) Results. Results are grouped by relationships between components in the following summaries:

(A1) Administrative support and team functioning. Certain administrative practices supported team functioning. Administrative practices that were associated with team performance included (1) a strong emphasis and emphasis on school wide discipline that supported team disciplinary procedures and which enabled the team to spend less time in team meetings on discipline issues and more on instruction, (2) a commitment to teaming as a professional obligation, (3) the modeling of teamwork by the administrative team composed of the guidance department, principal and assistant principal, (4) the upholding of best practices from research studies to use for team goal setting, (5) team training by the assistant administrator in weekly team planning to incorporate state/ ITBS (Iowa Test of Basic Skills) objectives and the content of separate subject areas into thematic units, (6) the design and use of a one-page team planning form for weekly planning, (7) weekly written constructive feedback and follow-up by the assistant administrator on team plans, and (8) the elimination of submission of individual teachers' lesson plans.

(A2) Administrative support and classroom practices. Certain administrative practices supported classroom practices. These practices included

* a strong emphasis on school-wide discipline (the principal spends 90% of her time in the hall) evidenced by a 20% reduction in out-of-school suspensions from a total of 228 in 1996 to 172 in 1997-1998, a 20% reduction in in-school-suspensions from 652 students in 1996-1997 to 514 students in 1997-1998 (Shuman Middle School Title 1 School-wide Final Evaluation Report)

* each teacher had an Individual Improvement Plan with a school-wide total of 120 objectives

* allocated resources for field trips ($6,000 was spent on field trips), staff development (teachers participated in a total of 250 days of professional development), and student

recognition (over 300 medallions awarded to students for honor roll, perfect attendance and citizenship; 8 plaques recognizing three years of academic excellence and perfect attendance; 85 students in 8th grade awarded a trip to St. Augustine, Florida, for good behavior and scholastic achievements,

* an attitude of "no excuses" and "we are accountable" in addition to weekly inspiration writings from the assistant principal to the staff and teachers,

* over 194 school volunteers in classrooms in 1997-1998, as compared to 120 in 1996-1997; with 780 voluntary hours by business or community partnerships as compared to the Georgia median of 150 hours.

* an increase in attendance over a three year period for each of the 9- 20 day periods from an average of 92.5% to 94.2%.

(B) Teaming functioning and classroom practice. Evidence was found that team planning impacted class performance, as exemplified in the following findings: (1) team weekly plans revealed at least four all-subject thematic units per team for the school year, (2) students received instruction that was connected by a total of approximately 25 thematic units across subject areas, (3) team plans had a high rate of implementation, with seventh and eighth grade teams implementing 80-85% of team plans and 6th grade teams implementing 90-95% of team plans,

Team Functioning Indicators. Teachers perceived the frequency of team practices similarly with means on a scale of 1 (never) to 6 (always). Responses (n=41) to the questionnaire entitled Team Process Inventory (TPI) indicated high team functioning related to (1) *task focus*, e.g., implementation of decisions made as a team (M=5.56), discussion of team goals (M= 5.56), (2) *teaming skills* e.g., bring closure to discussions (M= 5.34) and put time to good use in team meetings (M= 5.46), and (3) *attitude*, e.g., members value their differences (M= 5.46), members prefer to work together than alone (M= 5.17). A comparison of scores of the TPI, using one-way ANOVA, revealed significantly higher means ($p<.001$) for the target school than a school of similar student demographics. All teams indicated they considered their team to be a success.

(C) Impact on classroom Practices. As administrative behaviors and team collaboration influence classroom practices, teachers gain a number of benefits, such as, greater support emotionally from team collaborations and personal interactions with team members, a variety of instructional plans and ideas, and support with management issues. As a result, teachers are better equipped emotionally and materially to expand opportunities for learning. Consequently, they provide a richer environment for learning, with more attention to individual needs. Evidence of classroom practices influenced by administrative support and team collaborations included (1) vocabulary word lists were coordinated with four of the nine teams, (2) uniform formats for students' assignments existed in six of the nine teams, (3) coordination of testing schedules took place in all teams, (4) uniform discipline procedures and consequences existed in all teams, (5) team coordination impacting classroom content and conduct resulted in approximately 330 parental conferences, 25 field trips, 5 awards ceremonies, and 8 community performances by the strings, drama, and band groups.

(D) Student Outcomes. Because of a higher level of practices in all subsystems, student outcomes were affected. Within-school trends, the Georgia Public Education Report Card for the target

school and the Shuman Middle School Title 1 Final Evaluation Report (1997-1998) reported achievement gains in 8th grade reading scores from the 26th percentile in AY 1994-95, to the 32nd percentile in AY 1995-96, to the 33rd percentile in AY 1996-97, to the 40th percentile in AY 1997-1998 with district percentiles scores of 36, 35, and 34, respectively and state percentiles scores of 53, 48, and 48 respectively for the three year period of years 1994-1997. Achievement gains in 8th grade math scores were evidenced by increases from the 26th percentile in AY 1994-1995, to the 32nd percentile in AY 1995-96, to the 50th percentile in AY 1996-1997, and the 50th percentile in AY 1997-1998, above the district scores of 35, 39, and 41 respectively, and state scores of 52, 53, and 54 respectively across the three year period of 1994-1997.

Between-school comparisons of like schools schools revealed that the target school was in the top 20% of similar schools in six out of 15 indicators, in the top 40% in six out of 15 indicators, and improved more than 5 percentage points in three out of 15 indicators. No other Cluster 7 schools in 1996-1997 reports showed such high rankings nor such improvement across the 15 indicators. Other local schools in both higher and lower SES clustered schools documented either a decline in scores, or same or slight to moderate increases in math and reading scores.

(F) Educational Importance

The results provide compelling evidence that supportive administrative practices and high team functioning influence classroom practices, which in turn lead to increased student outcomes. The focus on team process alone is not sufficient to affect classroom practices and teacher behaviors; all subsystems need to work together to increase student learning. The study contributes to the importance of the systemic approach to understanding, integrating, and coordinating all subsystems impacting student outcomes (Elmore, 1995). The proposed model (see Figure 2) provides a representation of administrative practices and team functioning that affect classroom practices to enhance learning and to increase student outcomes.

The totality of administrative support for team and classroom performance in addition to team collaborations provides increased benefits that impact student learning. These benefits encompass teacher training in teaming planning, resource allocations, emotional support, and the generation of creative ideas that stem from team collaborations. The product is a richer learning environment in a safe and orderly school that enables more student time on task, varied and relevant learning activities connected across subject areas, greater order through team lesson planning, more opportunities for learning, and increased student and teacher motivation through awards, recognition, and reinforcements for learning.

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Figure 1: Systemic Model

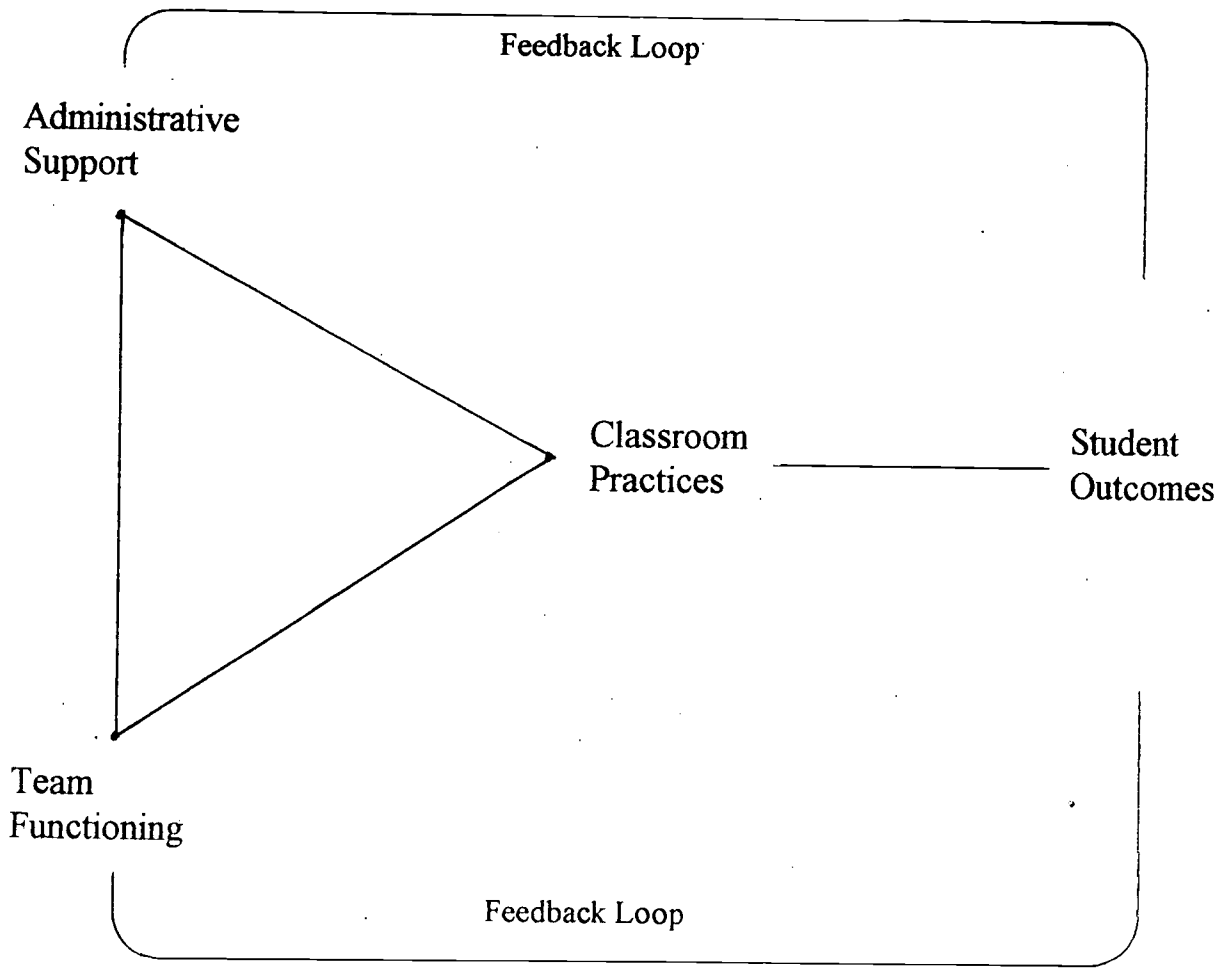

Figure 2: Data Collection Model

Method	Administrative support	Team Functioning	Classroom Practice	Student Outcomes
Team Process Inventory		x	x	
School Comparison Data	x			x
School Documents	x	x	x	x
Interviews	x	x	x	x
GA Report Card	x			x
GA Performance Report	x			x
Team Lesson Plans		x	x	x
Summary				

a. x = data source included in the study

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