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ABSTRACT
                A pilot program based on a school-based decision
making model (SBDM) implemented in eight inner city schools is
evaluated in this report. The relationships between program
effectiveness and school climate, between teacher characteristics and
teacher perceptions of school climate, and between student
characteristics and student perceptions of school climate are
examined. Three instruments are applied to assess school climate,
classroom climate, and self-concept: the Tennessee School Climate
Inventory (TSCI); Tennessee Classroom Climate Inventory (TCCI); and
Self Concept as a Learner--Revised (SCALR). Factor analysis indicates
that perceptions of successful program implementation correlate
positively with school climate. A comparison with nonparticipating
schools shows that schools in the program demonstrate a more positive
school climate. Three statistical tables are included. (LMI)

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School Based Decision Making

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Baseline Data on School Climate, Classroom Climate, and Self Concept as a Learner in Schools Using School Based Decision Making

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The Memphis City School District requested that eight of its schools be granted waivers to deviate from the established rules and regulations of the Tennessee State Department of Education (DOE). The DOE granted the request for a three-year pilot program beginning in the fall of 1989. Deviations from the norms would be made relative to individual school customs, beliefs, traditions, and values concerning what is best for the students in a particular school. These decisions would be made by site councils from each school following a school-based decision making (SBDM) model. Although eight schools were initially identified to participate in the SBDM program, additional funding to implement the project was needed and the school board funded only seven schools (two secondary, two junior high, and three elementary). Each of these inner-city schools has a disproportionate number of at-risk youth.

All faculty and administrative positions in these schools were declared vacant. A temporary interview team was established composed of: (a) the project director, (b) two central office staff appointed by the superintendent, (c) the current and past presidents of the Memphis Education Association, and (d) two parents and one community member who had been active in the schools. This interview team then interviewed prospective principals and recommended five to the superintendent who made the final appointment. The principal then joined the team. Teachers applied to work within a SBDM structure and were screened by the Division of Personnel Services to insure that they held proper credentials. Final hiring was done by the interview team. As personnel were hired, a permanent site council for each school was established to include the

principal and assistant principals (if any), and elected representatives to include: two parents, one community member, and three teachers. For a detailed discussion of the selection process and the establishment of the site councils, see Etheridge, Hall, Brown, and Lucas (1990).

The first year (1989-90) of the SBDM project was devoted to establishing the school site councils and to training faculty, staff, and councils concerning SBDM. A primary goal of the first year was for each school to conduct a needs assessment and from this data, develop an action plan. Decisions made by the site councils during the first year involving curriculum, personnel, or budgetary matters would not be implemented until the fall of 1990.

Included in the SBDM project was an evaluation component to determine if SBDM was an effective means to administer these schools. Effectiveness was not identified at the beginning of the project, but the school district requested that Memphis State University (MSU) provide some measures of evaluation. A team of researchers from MSU established a series of research projects that would be ongoing for the three-year period. A main thrust is an ethnographic research agenda that uses a case study analysis of each of the schools in order to determine the organizational structures, decision making methods, communication styles and other constructs within each school that hinder or support the implementation of SBDM (Etheridge et al., 1990). These data are provided to the schools' site councils on a yearly basis along with an analysis of the implementation efforts of the individual school's SBDM model. Another part of the research agenda is an analysis of the types and kinds of decisions that are made by the school site councils. This information is being used for feedback to the councils and to develop training materials for the decision making process of SBDM. Lastly, each school administers three survey instruments to various constituents at the end of each school year. The three instrument are: Tennessee School Climate Inventory (TSCI), Tennessee Classroom Climate Inventory (TCCI), and Self Concept as a Learner-Revised (SCALR). This paper presents an

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analysis of the results of the first administration of these instruments, providing a measure of baseline data prior to the implementation of changes in the schools' curriculum, personnel, or budget due to SBDM.

Method

The initial interest of the researchers concerned school climate, and a review of existing school climate instruments was completed. Instruments to assess school climate, classroom climate, and self concept were utilized in this study. For each of these instruments exploratory factor analytic studies were completed and preliminary reliability coefficients were obtained. Reliability scores were acceptable for all three instruments. For a detailed technical discussion of these instruments, see Butler, Alberg, McNelis, Pike, and Chandler (1990).

TSCI (school climate) generates measures of school climate constructs that have been reported to be associated with effective schools. There are seven scales each with seven items. The scales are:

- Order: Extent to which the environment is ordered and appropriate student behaviors are present.
- Leadership: Extent to which the administration provides instructional leadership.
- Environment: Extent to which positive learning environments exist.
- Involvement: Extent to which parents and the community are involved in the school.
- Instruction: Extent to which the instructional program is developed and implemented.
- Expectations: Extent to which students are expected to learn and be responsible.
- Collaboration: Extent to which the administration, faculty, and students cooperate and participate in problem solving.

For this research project, the TSCI was revised to include 11 questions designed to evaluate the perceived effectiveness of SBDM in school improvement.

TCCI (classroom climate) contains 11 scales of four items each. There are two forms of the TCCI--upper elementary and junior/senior high school versions. They are based on a fourth grade reading level, and they were pilot tested with third graders who experienced no difficulties with the meaning of items. The classroom climate dimensions are:

- Cohesiveness: Extent to which students know, help, and are friendly toward each other.
- Equality: Extent to which students perceive equal treatment.
- Curriculum: Perceptions of class objectives, value associated with the subject, and student involvement in curriculum decision making.
- Difficulty: Perceptions of instructional pace, subject matter difficulty, effort required, and challenges presented.
- Communication: Perceptions of verbal communications in class and with parents.
- Evaluation: Practices relating to evaluation procedures and reporting to students.
- Physical Environment: Adequacy of classroom space, books and materials; comfort of the setting.
- Order: Extent to which the class is organized, rules are enforced, and confusion/misbehavior exists.
- Instruction: Perceptions of involvement of learners in class activities, subject presentation, and value of homework.
- Culture: Perceptions of class ethos including respect and trust, feelings of pride in the classwork, and lack of boredom.
- Satisfaction: Extent to which students anticipate and enjoy the class, like to have visitors, and reflect encouragement.

Finally, SCALR (self concept as a learner-revised) measures four dimensions of 11 items each. Again, two forms of the instrument are available and each was checked for readability and item clarity.

- Motivation: Degree to which the students perceive themselves motivated to do school work and participate in learning activities.
- Task Orientation: Way the students see themselves in relation to various learning activities.
- Problem Solving: Conception of self as problem solver.
- Class Membership: Manner in which the students view themselves in relation to other members of the class.

Four items were added to both the TSCI and SCALR to assess student perceptions of the amount of involvement both parents and students have in the school affairs. Demographic data was also collected by each of the instruments and was used in the preliminary analysis.

Each of the instruments was administered in the spring of 1990, which was at the end of the first year of the SBDM pilot project but prior to the implementation of any curricular, personnel, or budgetary changes. Therefore, results should be considered as baseline data.

TSCI was administered to all teachers, administrators, and site council members of each school. Help was provided by a member of the research team in interpreting the meaning of certain items to parents who had reading difficulties.

TCCI (classroom climate) was administered to grades 4, 7, and 10, and SCALR (self concept) was administered to students in grades 5, 8, and 11. The elementary form of each instrument was given by the teacher who had the students in self-contained classes, and the junior/senior high form was administered by the students' English teachers.

The researchers were interested in establishing base rates so that later data can answer several questions: (a) Is there a relationship between the perceived

effectiveness of the implementation of SBDM and school climate? (b) Are certain characteristics of teachers related to their perceptions of school climate? (c) Are certain characteristics of students related to their perceptions of classroom climate and self perceptions as learners?

It was hypothesized that teachers who perceived SBDM's implementation to be effective would rate school climate more highly in their school. To test this, a simple Pearson correlation was run on a combined mean score of each individual's ratings on the 11 SBDM implementation questions with the overall mean score on each person's TSCI, and with the seven subscale means for that individual. These correlations were completed for teachers by elementary, junior high, and senior high school positions.

It was also hypothesized that teachers in lower grade levels would be more positive about their school environment. T-tests and ANOVA's were run to test differences in school climate scores based on teacher characteristics (race and age) by level (elementary, junior high, and high school).

Finally, it was felt that certain student characteristics would affect their perceptions of class climate and self concept as learners. To test this, both T-tests and ANOVA's were completed by grade level on a variety of student characteristics (gender, extracurricular involvement, potential for dropping out or going to college, and academic performance).

The assumptions leading to the above hypotheses are taken from research generated on a sample of 37 schools in Tennessee where these same instruments were administered in the fall of 1989 (Butler et al., 1990). This previous research shows elementary schools to be places in which more comradery is found among faculty, more positive school climates are generally the rule, and more agreement is found among the professional staff regarding school goals and teaching methods. In addition, this research found that the student characteristics listed in the above paragraph influenced student perceptions of classroom climate and self concept as learners.

Results

SBDM Implementation (See Table 1)

Elementary. The mean scores of elementary teachers (n=84) concerning their individual perceptions of the implementation success of SBDM correlated positively with the overall mean of each individual's TSCI (r=.71). The correlation coefficients for each subscale were: Order (.54), Leadership (.67), Environment (.62), Involvement (.62), Instruction (.59), Expectations (.59), Collaboration (.64).

Junior High. The correlation coefficient was .61 for mean scores on SBDM implementation and overall mean scores on the TSCI. Junior high school teachers' mean scores (n=42) on SBDM implementation correlated from low to moderately positive with each of the seven TSCI subscales. Subscale correlation coefficients were as: Order (.65), Leadership (.50), Environment (.55), Involvement (.43), Instruction (.29), Expectations (.52), Collaboration (.56).

High School. Senior high teachers' mean scores (n=46) on SBDM implementation correlated with the overall mean on the TSCI with a correlation coefficient of .36. Mean scores for SBDM implementation correlated from low positive with each subscale. Subscale correlation coefficients were: Order (.30), Leadership (.27), Environment (.13), Involvement (.41), Instruction (.34), Expectations (.33), Collaboration (.14).

School Climate

The TSCI has seven subscale dimensions: Order, Leadership, Environment, Involvement, Instruction, Expectations, and Collaboration.

In general, no differences were found in school climate subscale means among different age groupings by teacher grade levels.

In addition, there were no differences detected in school climate subscale scores among administrators, teachers, or parents.

Elementary. Black teachers were more positive about school climate than non-black teachers in four of the seven subscales: Order, Environment, Involvement, and Collaboration (see Table 2).

Elementary teachers were more positive about their school's climate in the following five of the seven subscale dimensions than either junior high teachers, senior high teachers, or both groups (see Table 3).

- Order: more positive than junior high teachers.
- Leadership: more positive than both junior high and senior high teachers.
- Involvement: more positive than both junior high and senior high teachers.
- Expectations: more positive than both junior high and senior high teachers.
- Collaboration: more positive than senior high teachers.

Junior High.

There were no differences in school climate scores between black and non-black junior high teachers.

However, junior high teachers were more positive than senior high school teachers in the one subscale dimension of Leadership and less positive than elementary teachers in three dimensions: Order, Involvement, and Expectations (Table 3).

Senior High. Black senior high teachers were more positive than non-black teachers on three dimensions: Leadership, Involvement, and Collaboration (Table 2).

Senior high teachers were less positive than elementary teachers on four dimensions: Leadership, Involvement, Expectations, and Collaboration. They were also less positive than junior high teachers on the Leadership subscale (Table 3).

Classroom Climate

TCCI has 11 subscale dimensions: Cohesiveness, Equality, Curriculum, Difficulty, Communication, Evaluation, Physical Environment, Order, Instruction, Culture, and Satisfaction. This section is presented by independent variable.

Gender. The mean scores for females by grade level were generally higher on most subscales. Senior high school females were more positive than males on the Satisfaction dimension, and junior high females were more positive on two subscales: Curriculum and Order.

Extracurricular Activities. There were no questions concerning extracurricular activities for elementary students. These questions were included on the junior/senior high form only. For junior high students, there were no differences between those who participated in no extracurricular activities and those who participated in one or more. However, senior high students who participated in one or more activities were more positive on the Cohesiveness dimension than those not involved.

Dropout Potential. Those junior high students who indicated that they have considered dropping out of school had lower class climate scores on nine of the 11 subscales: Equal, Curriculum, Difficulty, Evaluation, Environment, Order, Instruction, Culture, and Satisfaction.

Potential drop outs in senior high scored lower on all dimensions of the TCCI, except Communication.

College-Bound. Higher mean scores were found for junior high students who indicated that their primary goal after high school is go to college on the following dimensions: Equality, Curriculum, Evaluation, and Satisfaction.

Senior high college-bound students were more positive about classroom climate on the following: Equality, Curriculum, Evaluation, and Culture.

Performance Levels. No differences were found in students' perceptions of classroom climate within grade level based on their perceived academic performance levels of themselves.

Self-Concept

SCALR has four subscales: Motivation, Task Orientation, Problem Solving, and Class Membership.

Gender. There were no differences between senior high male and female self concept means; however, both elementary and junior high males had lower self concept means on the Motivation and Class Membership subscales.

Extracurricular. Although no differences were found between junior high students who participated in extracurricular activities and those who did not, senior high students who participated had significantly higher mean scores on Motivation and Class Membership subscales.

Dropout. Both junior high and senior high students who indicated that they have considered dropping out had lower self concept scores on Motivation, Task Orientation, and Problem Solving. In addition, senior high students also scored lower on Class Membership.

College-Bound. Junior high college-bound students scored higher on all four subscale dimensions, while senior high students scored higher on Task Orientation and Problem Solving.

Academic Performance. Three groups were tested at each grade level: (a) those students who indicated they receive mostly "A" grades or "B" grades, (b) those who receive mostly "C" grades, and (c) those who receive mostly "D" or "F" grades.

Elementary students who indicated receiving mostly A's or B's had higher mean scores than all other students on the subscales Motivation and Problem Solving. In addition, those receiving mostly A's or B's and those receiving mostly C's had higher scores than those receiving mostly D's or F's on Task

Orientation and Class Membership. Also, those receiving mostly C's scored higher than the D's or F's group on Problem Solving.

Junior high students who receive mostly A's or B's had better self concepts as learners than all other students on the following subscales: Problem Solving and Class Membership. In addition, they had better self concepts as learners than those receiving mostly D's and F's on the Motivation subscale. Also, those junior high students who receive mostly C's had higher mean scores than those receiving mostly D's and F's on Task Orientation and Problem Solving.

Senior high students who receive mostly A's and B's scored higher on the subscales Motivation, Task Orientation, and Problem Solving than all other students, and higher on Class Membership than the C's group.

Summary of Results and Discussion

Data collected from the instruments used in this study will be charted over a period of at least three to four years to determine the effects of SBDM. The results of this baseline data confirm the hypotheses posed earlier in this paper. Perceptions of successful implementation of school based decision making (SBDM) correlate positively with school climate, with the lower grades having higher correlation coefficients than upper grades on most TSCI subscales. In addition, lower grade teachers in general view their school environments more positively than do upper grade teachers. Of particular note is that teachers in lower grades tend to believe that administrators provide greater instructional leadership. In addition, elementary teachers perceive their school environments to exhibit a more ordered, well-behaved student body; and, they are in more agreement that there are high expectations for students to learn and be responsible. Generally, professional staff as well as parents who participate in the school site councils feel positive about the school's climate. Black teachers, however, feel more positive than non-black teachers in both the elementary and senior high school environments, particularly concerning the extent to which parents and community members are involved in the school and the amount of

cooperation evident among the school communities in solving problems. Non-black teachers may view themselves as minority representatives since most of the student and parent populations are black.

More positive classroom climate is perceived by females. Both male and female students who participate in extracurricular activities in senior high school are more positive about their classmates' concern for one another. College-bound students and those who have never considered dropping out of school have a more positive attitude about their classroom environments. Conversely, junior and senior high students who are not college-bound feel that students are not treated equally, that the curriculum objectives are unclear and unimportant, that grades are capriciously given, and that there is general dissatisfaction with the classroom climate. Those who have considered dropping out feel the same, and in addition, indicate even more dissatisfaction with the classroom climate in other ways: subject matter is too difficult and not paced well, the physical environment of comfort and space of the classroom is inadequate, and the class is unorganized and lacks good student behavior. Interestingly, grades were not a factor in classroom climate scores.

Gender was not a significant factor in determining self concept scores, with the exception that elementary and junior high males feel less motivated to do school work and less part of the group than do females. Senior high students who are active in extracurricular activities have better self concepts as learners, and in general, both junior and senior high students who had never considered dropping out of school have more positive self concepts as learners. There is strong evidence that college-bound students and those who perform better academically view themselves positively as learners.

In this study, the potential dropouts defined themselves. These students had lower mean scores on the classroom climate and self concept as a learner inventories. These data confirm much of the literature concerning at-risk

populations (Slavin, 1988), where those who are at-risk are defined as potential dropouts.

When comparing this data to normative data on the 37 Tennessee schools administered these questionnaires in the fall of 1989, these seven inner city schools appear to have more positive school climates as rated by teachers, administrators, and parents on the school site council. In addition, students seem to have more positive views of their classroom environments and feel better about themselves as learners than the normative group. This could be attributed to the fact that these seven schools are "special". They were singled out as the few schools in a large district to receive special treatment over a period of several years; they are schools in which all professional personnel applied for their positions because they were motivated to do so; and they are schools in which expectations were high that SBDM would be a significant factor in making these schools better places in which to work and learn.

The initial assessment concerning the teachers, administrators and parents indicates that a positive climate has been established for implementing SBDM. The planning and preparation during this first year was characterized with extensive involvement of all parties impacted by the change effort. This situation not only reflects the basic philosophy of SBDM, but will help maintain the enthusiasm and commitment necessary to implement SBDM. Most of the teachers and administrators had the opportunity to become a part of this innovation and were not forced through bureaucratic systems to implement a change effort. The SBDM model is a classic "bottom-up" effort to accomplish significant change through extensive involvement of the personnel impacted by the change. The shifting of decision-making to the community level seems to be casting new roles and a greater sense of accountability for improving the education in these schools. As teachers and principals learn new roles and share the responsibility for making significant decisions with community leaders, new alliances are being formed to capture the public support and confidence to improve education at all

costs. The overwhelming positive attitudes in these targeted schools as compared to other schools in Tennessee is in itself a significant factor in accomplishing better results to improve the quality of education. The implementation effort in this study during the first year for SBDM is similar to a "seed" that has been gently prepared with the right amount of nutrients for the flower to grow and eventually bloom.

The 1990-91 school year will be a time of implementing changes proposed by the site councils in their action plans. As this second year of the SBDM project unfolds, much of the initial enthusiasm about this new, exciting project will undoubtedly subside. As in any innovation, a period in which the change itself has a positive impact on the attitudes and interactions on the players (Hawthorne effect) occurs, generally followed by a decrease in this effect. It is therefore anticipated that the second administration of the instruments used in this study will result in slightly lower overall means, particularly those directly addressing the impact of SBDM. In our opinion, it will be after the third year that we will be able to judge more accurately the lasting effect that SBDM has on individual school climate, classroom climate, and self concept as learners.

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Table 1.

Correlations of SBDM effectiveness and school climate ratings by grade level.

	ELEM n=84	JR HIGH n=42	SENIOR HIGH n=46
Order	.54*	.65*	.30*
Leadership	.67*	.50*	.27*
Environment	.62*	.55*	.13
Involvement	.62*	.43*	.41*
Instruction	.59*	.20*	.34*
Eexpectations	.59*	.52*	.33*
Collaboration	.64*	.56*	.14
TOTAL SCALE	**.71***	**.61***	**.36***

*$p<.05$.

Table 2.

<u>Means for school climate subscales by ethnic group.</u>

	<u>Black teachers</u>	<u>Non-black teachers</u>
<u>ELEMENTARY</u>		
Order*	25.52	20.63
Leadership	29.60	28.25
Environment*	27.78	25.34
Involvement*	28.71	26.03
Instruction	28.91	27.75
Expectation	29.34	27.75
Collaboration*	26.56	24.09
JUNIOR HIGH	**NO DIFFERENCES BY ETHNIC GROUP**	
HIGH SCHOOL		
Order	22.94	20.31
Leadership*	27.16	23.44
Environment	25.90	23.06
Involvement*	25.13	31.06
Instruction	27.68	26.38
Expectation	25.77	22.94
Collaboration*	24.13	20.19

*Significant difference by ethnic group, $p<.05$

Table 3.

Mean school climate ratings by grade level.

	ELEM	JR HIGH	SENIOR HIGH
Order[3]	23.59	19.04	21.67
Leadership[2]	29.24	28.35	25.46
Environment	26.73	24.33	24.76
Involvement[1]	27.62	25.48	23.56
Instruction	28.64	28.28	27.48
Expectation[1]	29.01	25.96	25.30
Collaboration[4]	25.80	24.39	22.30

[1] Elementary differs significantly from junior high and senior high.

[2] Both elementary and junior high differs significantly from senior high.

[3] Elementary differs significantly from junior high.

[4] Elementary differs significantly from senior high.