To broaden the scope of effective schools research by including change processes and a wider unit of study, this project investigated three Georgia school districts demonstrating improvements in student achievement for three consecutive years. Research identified these elements: (1) the sequence and influence of events, factors, and people contributing to improvement; (2) commonalities among districts; and (3) factors unique to individual systems. Selection was based on improved scores on state reading and mathematics criterion-referenced tests by fourth and eighth graders. Researchers interviewed 30 administrators, teachers, and office personnel in each district for 1 hour. Questions concerned opinions about student gains, key events, influential people, school changes, and informants' changes. Eight categories, reported as common findings, revealed districts' commonalities: awareness and alignment, teaching and materials, planning and sharing, progress review, system-wide policies, competition and cooperation, influential persons, and costs. Conclusions involved four dimensions in overall change processes. First, a dialog about test importance and improvement plans was established among teachers and administrators. Second, an infrastructure facilitated dialog by increasing supervisory assistance for teachers. Third, instructional leadership was distributed so that various positions had specifically defined responsibilities for instructional improvement. Fourth, a "fulcrum" of support for teachers was provided as the "lever" of increased expectations was pushed. (CJR)
DIMENSIONS OF IMPROVING SCHOOL DISTRICTS

Edward Pajak
Carl Glickman
Department of Curriculum & Supervision
University of Georgia
Athens, Georgia 30602

ACKNOWLEDGMENT

The research reported here was funded by grants from the Georgia Department of Education (PE1 No. 58-6001998) and the College of Education, University of Georgia. The opinions expressed in this paper do not necessarily reflect the position, policy, or endorsement of either agency. We wish to thank the research team which was composed of Dr. Charles Franzen and Dr. Lance Wright, as well as Ms. Sally Boyett, Mrs. Kay Mahar, Mrs. Mary Phillips, and Mrs. Deborah Williams. This paper is not an endorsement of the particular outcome measures these districts focused on, but is an attempt to understand how they succeeded. The authors believe strongly that each school district should decide upon its own criteria for success before deciding upon the appropriate actions that should be taken.
A number of factors have been identified as contributing to school effectiveness in the body of literature popularly known as "effective schools research." Recently, in an article in the *Elementary School Journal*, Michael Fullan (1985) cautioned those who would try to draw prescriptions for practice from that literature by pointing out some of the limitations of the effective schools research. For example: a) most school effectiveness studies are based on improvements demonstrated for a single year, raising the possibility that "outliers" represent statistical flukes instead of exemplars of effectiveness; b) most studies focus on individual school buildings as the unit of analysis which essentially limits findings in advance to within school variables; and c) descriptions of effective schools are only "snapshots" of what already exists. Fullan elaborates on this last point as follows:

Above all the existing research tells us almost nothing about how an effective school got that way; it tells us little about the process of change. We need to look at the issue of causality. In most cases, it is not known how a good school got to be one. How did the characteristics of effective schools evolve in a particular school's context? Did certain factors exist before others? (Fullan, 1985, p. 398).

The Question and Methods

In this study, we tried to avoid some of these limitations by studying school districts which have demonstrated improvements in student achievement and which have sustained that improvement
for three consecutive years. More specifically, we wanted to a) identify the sequence and influence of events, factors, and people which may have contributed to improvement; b) identify commonalities, if any, across all three districts; and c) identify factors unique to individual school systems in order to construct a narrative of the change process for each.

The criterion for selection of a district was improved student achievement on state criterion referenced test scores for fourth and eighth graders in reading and mathematics. A linear regression formula was used to predict mean test scores for each district by factoring in the proportion of students enrolled in the free or reduced lunch program (see Table A-1). This number was compared to the actual mean raw scores in order to determine whether a district was performing better or worse than might be expected. We found only four (4) districts out of a population of one hundred and eighty-seven (187) which demonstrated continued residual score improvement for three consecutive years (see Table A-2) on at least three out of the four criterion referenced tests.

The smallest district served as a pilot for the study. The remaining three districts were visited by a team of six trained interviewers. Thirty individuals were interviewed in each district, including the superintendent, central office staff, principals, lead teachers, and teachers of reading and mathematics in elementary and middle schools. Each interview lasted approximately one hour and was tape recorded and transcribed. Questions that were asked included: 1) From your point of view, what accounts for the consistent gains students in
your district have shown on the CRT? 2) Looking back, can you think of any key events or turning points? 3) Who is the person or persons who have been influential? 4) What is different in your school now from five years ago? 5) What are you personally doing differently? 6) Is there anything else we haven't talked about that I should know? The typed transcripts were then analyzed for common themes which are reported here.

The Districts Studied

The three school districts which were studied are identified as Northview, Eastview, and Westview. Northview is a moderate-sized school system with approximately 280 teachers, seven elementary schools, two junior high schools, and one high school. It is located in a rural community in the northern mountain region of Georgia and has a predominantly white student population. Achievement scores of students have traditionally ranked in the top quartile in the state. Eastview is a large urban school system located in eastern Georgia with approximately 1300 teachers, thirty-three elementary schools, eight middle schools, and six high schools. The overall student population is balanced in racial composition between white and black students, and achievement scores have been below state averages. Westview is a small school system in western Georgia, consisting of 150 teachers, two elementary schools, one intermediate school, a junior high, and a high school. The majority of the student population is white. Students have scored among the highest in the state on achievement tests.
Results

Commonalities as well as differences are evident in the stories of CRT improvement in the three school systems. After reviewing the data, eight general categories were developed that describe the major commonalities. The categories are (1) awareness and alignment, (2) teaching and materials, (3) planning and sharing, (4) reviewing progress, (5) systemwide policies, (6) competition and cooperation, (7) influential persons, and (8) costs. Under each category particular findings will be reported.

Common Findings No.1

Awareness and Alignment

Awareness of CRT: Teachers, principals, and support personnel were made aware of the criterion referenced tests. In each school system, at the beginning of the improvement effort, the importance of the CRT as a measure of school and systemwide success and as a measure of individual student progress for promotion in the fourth grade and eighth grade was emphasized.

Data on CRT Performance: In all school systems, educators were informed of how students performed on each objective of the CRT by school system, school, and grade level. Decisions on what to teach, when to teach, and what to emphasize were based on the student scores from the previous year.

Aligning Curriculum to CRT Objectives: At the beginning of the improvement period, teachers, principals, and central office personnel were asked to review CRT objectives and correlate those objectives with the existing curriculum. In cases where there
was no coverage of a CRT objective, the curriculum was revised to include all of the objectives.

Coverage of CRT Objectives: With curriculum alignment to CRT objectives, curriculum content was sequenced and text materials ordered so that students were taught all CRT objectives prior to the spring test administration.

Common Findings No. 2

Teaching and Materials

Selection of Textbook and Teaching Materials: Alignment of CRT objectives with textbook series in reading and mathematics was conducted. Decisions on future adoption of textbook series were made based on adequacy of coverage of CRT objectives. Each of the school systems eventually adopted a single textbook series for both elementary and middle schools.

Procurement and Development of Teaching Materials for Particular CRT Objectives: Whenever certain CRT objectives were judged to be inadequately covered in the textbook, the school systems provided additional teaching materials. Files of activities coded to objectives were developed by and shared among teachers.

Instructional Time Organized to Reflect Content Importance: More time was allocated for the teaching of reading and mathematics. Teachers were clear on the purpose and sequence of each daily lesson and the instruction was tightly sequenced and more teacher-centered.
Test Taking Practice and Preparation: Prior to the CRT administration, students were prepared on how to take the test, i.e., following directions, filling in answer sheets, and practicing on sample tests. Students were instructed to be well rested and fed. Parents were notified of the days of the tests and given hints on how to prepare their children.

Common Findings No. 3

Planning and Sharing

Coordination of Teaching With Compensatory Teachers: Those students who received additional mathematics and reading instruction as part of the school's compensatory education program received instruction closely related to the work that they were doing in the regular classroom. As a result, the students were retaught and reinforced on CRT objectives in both classroom settings.

Plans for Improvement: In all three school systems, action plans identifying targets for CRT improvements and related activities and resources were written. In most cases the plans were written at the school, grade, or department levels. (At one school, in one school system, the plans were developed at the individual classroom level).

Exchanging Classroom Materials: Teachers identified materials in their possession to share with each other and created materials that would be useful for other teachers in teaching CRT objectives.
Staff Development Time for Planning: Part of contracted inservice days during the school year were used for teachers to review CRT results, to meet together and plan improvements, to review progress, to organize their lesson plans, and to complete individual student records. In none of the school systems was staff development time used to train all teachers in particular teaching behaviors.

Common Findings No. 4

Reviewing Progress

CPT Objectives Noted in Lesson Plans: All teachers of reading and mathematics either noted on their daily lesson plans and/or were conscious of the CRT objectives that they were covering.

Reviewing CRT Lesson Coverage and Progress: In each school system, teaching of CRT objectives was reviewed during the school year by principals, central office supervisors, building level supervisors, peers, or some combination of these. Recording Keeping on Individual Student Mastery: Mathematics and reading folders were kept for each student. The forms noted the CRT objectives to be taught and when the student had mastered each. In middle schools, this record keeping was not kept for students who were above average in reading and mathematics achievement.

Common Findings No. 5

System-Wide Policies

Promotion Standards: In each school system, standards for promotion into the fifth or ninth grade were based in part on the
performance of individual students on the CRT test in the fourth or eighth grade.

Attendance Standards: Stringent attendance policies were developed and enforced. Excessive absences and tardiness were noted as part of the promotion policy.

Accountability: Students and parents were informed that the CRT tests were to be taken seriously and promotion would be based on a student's performance. Teachers also knew that their students would be required to pass the tests if they were to progress. It should be noted that CRT performance wasn't the sole criterion for promotion and there was discretionary judgment for promoting low-achieving students.

Common Findings No. 6

Competition and Cooperation

Competition Among Schools and Systems: Test results by school were distributed among school personnel and systemwide results on CRT tests were compared to surrounding school systems and published in the newspapers. As a result, there was a heightened awareness of how one school and system measured against others.

Collective Spirit Within Schools: Teachers spoke frequently of what they were doing as a team for their students and of how they helped and shared instructional concerns with each other. They often mentioned the great satisfaction that they received in seeing how well the students were doing on achievement tests as a result of their collective efforts.
Common Findings No. 7

Influential Persons

New superintendents who emphasized CRT Test Scores: In all three school systems a new superintendent came into office just prior to 1982 and communicated to staff and public that test score results were to be a measure of systemwide success.

Central Office Supervisors Coordinated Systemwide and School Instructional Efforts: Each system employed central office personnel whose primary responsibilities involved curriculum and instruction. Their positions were generalists rather than content specialists (i.e. director of instruction, secondary supervisor, elementary coordinator). The generalists worked with personnel in individual schools as well as representative committees of the system as a whole to make decisions in regard to improving CRT scores.

School Principals as Resource Persons to Teachers: Principals in all three school systems were seen largely as supporters and resource facilitators to teachers. They were not seen as doing the actual work of CRT improvement, such as committee work, curriculum revisions, arranging inservice, or developing record keeping systems. Rather, they encouraged other people (teacher groups, central office personnel, building level department heads, grade chairs, and lead teachers) to do the "hands-on" work. There were a few exceptions, but principals mainly were seen by teachers as persons they could turn to who would supply extra materials for them, who would try to relieve them of extra nonteaching burdens, and who would offer throughout the year
praise and encouragement to them.

Within School Professionals: Common to many of the schools were the existence of in-house personnel, who functioned in a staff position to teachers, who had largely instruction and curriculum responsibilities, and who did not evaluate teachers for contract renewal purposes. In some schools, these persons were classroom teachers who had additional responsibility as grade level or department chairpersons. In other schools, it was a full-time assistant principal for instruction or an instructional lead teacher. In other schools, it was a combination of both classroom teachers and assistant principal/lead teacher. These in-school professionals often functioned for their peers as the initiators, reviewers, and implementers of instructional improvement plans.

Teachers Themselves: Principals, central office personnel, and teachers frequently mentioned that teachers themselves were most influential in CRT improvements. Teachers shared ideas freely with each other, exchanged materials, wrote curriculum and lesson plans together, and at times even helped teach each other's students a particular skill or objective.

Common Findings No. 8

Costs

Increased clerical help: As teachers were asked to increase record keeping, ways to lessen the time spent on other duties were found. Some schools used a computer program to record and analyze student test performance and to record progress; other
Scholar Schools trained parent volunteers or hired additional aides to assume more of the clerical burdens of record keeping.

Smaller Classroom Sizes: In all three systems, there had been a reduction of class size since 1982. In some cases, class size had dropped from 33 students to 23 students per classroom.

Increased Planning Time: Over the three-year improvement period teachers were given more time to meet and plan as part of their normal school day. Inservice days were used for teacher planning; lunchroom, recess, and monitoring duties were reduced, and specialist teachers (P.E., music, art) were employed to give classroom teachers additional released time for meeting and planning.

Increased Materials: In all three school systems teachers overwhelmingly agreed that they had virtually any supplemental materials that they requested. Their principals, department heads, lead teachers, and central office supervisors quickly responded to constant teacher requests for additional materials.

Greater Supervisory Support: There were more persons in direct contact with teachers about classroom, grade, department, and schoolwide instructional concerns. In every system, supervisory or support personnel for teachers were increased by either hiring additional central office staff, hiring additional building level personnel (head teachers, assistant principals), or enlarging instructional responsibilities of teachers (as committee chairpersons, grade level or department heads).
Increased Pay: Teachers received consistent pay increases since 1982 in the form of local salary supplements and reimbursements for staff development courses in all three districts.

Conclusions

The overall change process in all three districts seemed to involve four major dimensions. First, a dialogue among teachers and administrators was established concerning the importance of criterion referenced test achievement and plans for improvement. Second, an infrastructure was created to facilitate this dialogue by increasing the number of positions providing supervisory assistance to teachers. Third, the function of instructional leadership was distributed so that various positions had specifically defined responsibilities for instructional improvement. Fourth, a "fulcrum" of support for teachers was provided as the "lever" of increased expectations was pushed.


REFERENCES