DOCUMENT RESUME

ED 386 787 EA 026 973

AUTHOR Butler, E. Dean

TITLE Improving School Learning Environments: A Resource

Manual of Knowledge and Strategies.

INSTITUTION Memphis Univ., TN. Center for Research in Educational

Policy.

SPONS AGENCY Tennessee State Dept. of Education, Nashville.

PUB DATE Jul 95

NOTE 18p.; Developed for use with "Developing Action Plans

for School Improvement: A Professional Development

Program."

PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *Educational Environment; *Educational Improvement;

Elementary Secondary Education; Organizational

Climate; *School Effectiveness; *School

Restructuring; State Action

IDENTIFIERS *Tennessee

ABSTRACT

This paper presents information to be used by school-leadership teams engaged in the development of school-improvement plans. It reviews recent literature on shared leadership and collaborative schools, school-improvement teams, school culture, and effective schools/positive learning environments. The paper also identifies school-level and class-level characteristics of effective schools. The Positive Attitudes in Tennessee Schools (PATS) program, implemented in 1989 as part of the school-decentralization movement in Tennessee, is also described. The program seeks to build school capacities for transforming learning environments through regular and systemic assessments and school-leadership teams. The school-climate audits are used to identify and strengthen or modify school-climate dimensions. (Contains 66 references.) (LMI)



^{*} Reproductions supplied by EDRS are the best that can be made

ERIC + 080 473

CENTER FOR RESEARCH IN EDUCATIONAL POLICY

A STATE OF TENNESSEE CENTER OF EXCELLENCE



Improving School Learning Environments: A Resource Manual of Knowledge and Strategies

E. Dean Butler
Center for Research in Educational Policy
College of Education
The University of Memphis

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization organization.
- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

July 1995

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) "

Developed for use with

Developing Action Plans for School Improvement:

A Professional Development Program

Institute for Excellence in Education Tennessee State Department of Education

The University of Memphis is one of 46 institutions in the Tennessee Board of Regents system, the seventh largest system of higher education in the nation. It is an Equal Opportunity/Affirmative Action university committed to education of a rion-racially identifiable student body.

Table of Contents

Introduction	1
Shared Leadership and Collaborative Schools	1
School Improvement Teams and Use of Data	2
Culture and School Reform	4
Effective Schools and Positive Learning Environments	
Characteristics of Effective SchoolsSchool-Level Characteristics	
Class-Level Characteristics	
School, Class, and Teacher Effects	r
Recent Effectiveness Studies	8
Cahaal Dafarma in Tana assas and DATC	



Introduction

From a policy-making perspective, the school as a unit of change has become politically important in recent years (Heck & Mayor, 1993; Sashkin & Walberg, 1993). Restructuring efforts such as culture building, teacher and parent empowerment, site-based management, data-based decision making, school improvement planning, new assessment strategies, and accountability systems, along with efforts to study the characteristics of effective schools, are grounded on the belief that schools as organizational units can be altered and evaluated in terms of their characteristics and productivity. Development of systems for profiling school indicators for use in school improvement is an outgrowth of this policy perspective (Oakes, 1986, 1989).

Restructuring of schools and school systems is a multi-dimensional phenomenon, involving a complex set of policies and processes (Malen, Ogawa and Kranz, 1990). Moreover, as Dimmock (1995) has noted, "... it is fallacious to look for direct links between restructuring and improved students outcomes, since few, if any exist" (p. 292). Restructuring is expected, however, to meaningfully influence teaching and learning through indirect, mediating variables such as school improvement planning, culture building, professional development, innovative leadership, participative organizational structures, resource allocation, and staff selection (Dimmock, 1995). Several of these critical mediating dimensions associated with educational restructuring are addressed herein.

Information presented here was prepared for use by school leadership teams engaged in developing school improvement action plans to address issues in learning environments. Readers interested in more extended presentations of current knowledge relative to school cultures, effective schools, shared leadership, collaborative school organizations, school climate assessments, and related concepts may find the references to be helpful.

Shared Leadership and Collaborative Schools

Contemporary school reform proposals consistently call for implementation of collaboration models which utilize innovative strategies for leadership development and decision making (Barth, 1990; Bolman & Deal, 1990; Fullan, 1993; Maeroff, 1993; Schlechty, 1990). These new strategies require different power arrangements within school buildings and among the various constituencies



(Schlechty, 1990). The call is for major shifts in the bureaucratic model, which traditionally has emphasized centralized control, planning, and decision making and delegation of responsibilities to others (Conley, 1991). Shared leadership can become a process for (a) allocating greater responsibilities and power to teachers and (b) insuring that all members of a faculty collaboratively define goals, formulate policy, and implement programs to enhance schools effectiveness (Brown, 1995).

Shared leadership is characterized by the following:

- Faculty empower nent;
- Shared mission, values and common goals;
- Open communications;
- Clearly stated roles;
- Collaboration;
- Shared decision making;
- Shared expectations; and
- Common purpose (Brown, 1995).

Collaborative schools, which reflect attributes of effective schools, provide a climate and structure which supports continuous school improvement and professional growth (Little, 1990; Smith & Scott, 1990). Key elements associated with schools as collaborative educational organizations include:

- Teachers and administrators are committed to the belief, based upon effective schools research, that education quality is largely determined by what happens within the school site;
- Effective instruction is associated with norms of collegiality and continuous improvement;
- Teachers, as professionals, are responsible for instruction and are held accountable for its outcomes;
- Practices and structures enable administrators and teachers to work together on school improvement; and
- Teachers are involved in decisions relating to school goals and means for achieving them. (Smith & Scott, 1990, p. 2)

School Improvement Teams and Use of Data

School improvement teams are one of four models currently used to implement shared leadership and decision making (Hallinger & Richardson, 1988). Typically composed of principals and teacher representatives, a major goal of the



improvement team is to enhance teacher empowerment. Development of competencies in using information in planning and decision making is fundamental to the empowering process.

Recent developments in using information and indicator systems in education planning present new challenges to policy makers, administrators, and teachers. In particular, the development of a conceptual framework that specifies clearly the linkages between information and education quality is a complex and challenging task (Ross & Mahlck, 1990). The task involves several critical dimensions, including (a) obtaining accurate and reliable information as appropriate indicators, (b) interpretation and use of information in constructing informed decisions, and (c) conceptual linking of the information to educational conditions and processes.

A contemporary construct associated with collection and use of information in planning school improvements is "environmental scanning," which involves a range of strategies for collecting information about an organization (Bryson, 1989). Through environmental scanning, school leaders access information appropriate for use in addressing issues associated with internal and external environments. Three related concepts important in environmental scanning procedures are "data," "information," and "knowledge." Data are facts, which, by themselves, are of little value. Information results from the analysis, synthesis, and evaluation of data. The aggregation of data yields patterns of information that can become knowledge. In short, knowledge is information put to use. Thus, data are not information until they are used for a purpose--for example, to form a conclusion, to make a decision, to form a judgment. Specific data about schools become information or knowledge when they are used to make judgments, address issues, solve problems, or formulate action plans.

Activities typically associated with the processes of obtaining and using information in planning school improvements are: (a) selecting sources of data, (b) identifying data collection techniques, (c) using data collection tools and techniques, (d) organizing and analyzing resulting information, and (e) summarizing and communicating the information to others (Thomson, 1993). Primary focus in using PATS school climate information is on leadership team members' engaging in analysis and interpretation. Communicating the information to others in the school and community is also expected.

Culture and School Reform

Values and norms emerge from the organization's culture of a school and guide teacher, administrator, and student behaviors. This elusive symbolic dimension of schools and classrooms may also be called "ethos," "climate," or even "saga," which exists as a story or script (Deal, 1993; Duncan 1989; Sashkin & Walberg, 1993). As a construct, the term "culture" provides a way to describe and explain "common and stable patterns across variable conditions" associated with schools as organizations (Deal, 1993, p. 7). A school's culture consists of the "basic assumptions and beliefs that are shared by members of an organization . . ." (Schein, 1985). It is the "character of an organization" or "the way we do things." Culture is manifested in the way members think and behave, it is shared, and it is learned (Duncan, 1989). Two important features of a positive school culture are valuing collaboration and acting in ways that are most beneficial to students (Fullan, 1993; Leithwood, 1992). A strong positive culture is also linked to productivity (Deal & Peterson, 1990, 1993).

Schein (1985) has suggested that "there is a possibility . . . that the only thing of real importance that leaders do is to create and manage culture and that the unique talent of leaders is their ability to work with culture" (p. 2). Numerous contemporary scholars and education reformers (Bolman & Deal, 1992; Lane and Epps, 1992; Deal, 1993; Deal & Peterson, 1993; Firestone & Wilson, 1993; Krug, 1993; Sashkin, 1993; Sashkin & Egermeier, 1993; Sashkin & Walberg, 1993) maintain that school leaders must be developed and empowered in order to transform school cultures for accomplishing systemic reform.

School leaders that are defined as "effective" are able to facilitate the development of shared visions and create changes in culture and values. These shared values become the basis of a school's culture (Deal & Peterson, 1990, 1993; Sergiovanni, 1990). Behaviors of principals which have been found to be effective in regard to creating and maintaining positive school cultures include:

- Gaining staff consensus for decision making within the school;
- Communicating that teachers and students have the potential to achieve;
- Holding celebrations to show appreciation for teachers;
- Developing student recognition awards;
- Asking for staff feedback on whether or not decisions are congruent with school values; and
- Being visible to staff and students (Thomson, 1993, pp. 1-8, 9)



Effective Schools and Positive Learning Environments

Characteristics of Effective Schools

Numerous school improvement efforts have been associated with use of the five-factor Effective Schools Model (strong leadership, high expectations of students, emphasis on basic skills, orderly environment, and frequent student evaluations). These factors were derived from research conducted in the 1970s and early 1980s (Duttweiler, 1938). However, additional characteristics of effective or exemplary schools have also been identified (Brookover & Lezotte, 1979; Cotton, 1995; ERIC Clearinghouse, 1984; Phi Delta Kappa, 1980; Reynolds et al, 1994; Rutter, 1980; Stringfield et al., 1993; Teddlie & Springfield, 1993; Wittrock, 1986). These may be summarized as follows:

School-Level Characteristics

- Positive school climate involving a complex set of cultural processes;
- Clearly stated educational goals, priorities, and standards;
- Well-defined mission;
- Dissatisfaction with the status quo;
- Emphasis on learning and instructional effectiveness;
- Restructuring which addresses agreed-upon goals for students;
- High expectations for teacher and student performance;
- Collegiality reflecting faculty cohesiveness;
- Shared and focused instructional leadership;
- Use of rewards, praise, and appreciation for favorable outcomes;
- Pleasant physical environment;
- Collaboration with community agencies in providing social services;
- Student centeredness;
- Clear, consistent discipline policies;
- Academically rich programs;
- Commitment to equity in learning opportunities and outcomes;
- Multicultural education integrated into school life;
- Caring and respectful treatment of students;
- Decision-making which takes teachers' views into account;
- Focused professional development and collegial learning;
- Strong parent and community involvement;
- Instructional leadership provided by the principal;
- Principal participation in recruiting and hiring new teachers;



- Systemic support for instructional programs;
- Computer technology to support school management and instruction;
- · Appropriate instructional services;
- · Fairly uniform teaching behaviors across classes;
- Schools as friendly but serious places;
- Respect of academic time by school personnel;
- · Active and academically oriented libraries;
- Prominently posted student honor rolls; and
- Quality assistance freely given to new faculty.

Class-Level Characteristics

- Understanding of academic tasks reflected by students;
- Engaged and responsible students;
- Student participation in class governance;
- Fair application of clear standards for student behaviors;
- Equity, respect and empathy for all socioeconomic and cultural groups;
- Preplanned curricula and academic push;
- Clear and focused instruction;
- Immediate feedback and reinforcement provided to students;
- · Committed teachers who accept accountability and are semi-autonomous;
- Teachers knowledgeable about content, teaching strategies, and communicating with students.
- High to moderate interactive teaching strategies;
- Critical and creative thinking skills valued;
- Instruction which integrates traditional schools subjects;
- Instructional grouping that fits students' academic and affective needs;
- Efficient use of learning time;
- Emphasis on basic skills;
- Frequent evaluation of pupils' progress with alternative assessments and traditional tests;
- Responsiveness to pupil needs;
- Appropriate use of homework;
- Smooth, efficient classroom routines;
- Extra time and instruction provided to high-needs students;
- Good models of behavior exhibited by teachers.

Because most characteristics of effective schools have been identified through research in elementary sites, secondary school personnel have often questioned the



findings' relevancy for their institutions. Recent research analyzing effective secondary schools has replicated findings reported for effective elementary schools (Teddlie, 1994). Factors include:

- Enriched curriculum highly relevant to student needs;
- Core of standards associated with a broad curriculum;
- Specialized career programs and quality counseling;
- Provisions for alternative types of learning and experiences;
- Stress on students' personal as well as educational goals;
- Sensitivity to individual student goals; and
- Shared instructional leadership.

School, Class, and Teacher Effects

In recent years, increased attention in school effectiveness research has focused on school-level characteristics which serve as supportive conditions for effective instruction at the classroom level. Questions remain as to whether classroom factors or school factors have the most power in determining student outcomes (Reynolds et al., 1994). Teddlie (1994) has proposed that "... change must occur at both the school and class levels simultaneously . . . since neither level can be adequately studied without considering the other" (p. 113).

Effective instructional leadership is associated with promoting both school-and class-level climates for increased learning. Emphasis at the school level "can be directly transported to the classroom level" (Teddlie, 1994, p. 128). Thus, school-level leadership remains important. The effective school principal guards ". . . the integrity of the classroom" (Teddlie, Kirby, & Springfield, 1989, p. 234). This produces a more organized class day, greater emphasis on interactive teaching, less variance in students' time on tasks, higher instruction and classroom climate scores, and the lower range of teaching behaviors not being tolerated by the principal.

In terms of class-level factors, teachers in historically effective schools have been found to outperform teachers in historically ineffective schools on several factors, including:

- classroom management;
- presentation and questioning skills;
- instructional strategies skills; and
- classroom social psychological climate (Teddlie, 1994).



Various methods of instruction have been associated with greater student achievement and school-wide productivity. Characteristics of effective instruction include:

- effective use of direct instruction;
- time on task;
- opportunity to learn;
- mastery learning;
- cooperative learning;
- personalized and adaptive instruction;
- use of advance organizers;
- high teacher expectations;
- longer wait time; and
- good questioning techniques (Creemers, 1994, p. 19).

Recent Effectiveness Studies

A number of recent inquiries examining characteristics of effective schools have provided results that both extend and challenge earlier findings. For example, previous notions that school consistency in effectiveness was typically maintained over a five- to seven-year period have been questioned. School performance may vary over two or three years (Nuttall et al., 1989). Schools have also been found to differ in effectiveness with student sub-groups: ethnic groups, ability ranges, and socioeconomic status (Aitken & Longford, 1986; Nuttall et al., 1989). However, one study of school productivity with less academically successful students validated many tenets associated with school effects research (Anderson et al., 1992). The characteristics associated with the "High-Flying" schools are:

- Clearly defined goals and high standards;
- Unusual attention to school culture;
- Principal leadership;
- Student participation and movement in classrooms;
- Dignified and respectful treatment of students; and
- Programs adaptations made by individual schools.

Rural schools are associated with characteristics that set them apart from urban and suburban counterparts: close ties to the central office, smaller size, emphasis on basic skills, low or moderate use of innovations, and focus on present, rather than future, expectations (Teddlie, 1994). Special features associated with effective rural schools include:



8

- Innovative strategies to cope with scarce resources;
- Increased homogeneity and consensual faculty goals;
- Greater parental involvement and community participation;
- Personalized leadership style of principal; and
- Stable faculty.

School Reform in Tennessee and PATS

Developing in concert with recent educational reform in Tennessee is the notion that the individual school unit should be the focus of change. Various efforts in Tennessee have reflected this policy perspective, including accountability standards, performance indicators, school-based decision making, strategic planning of school improvements, and the development of positive learning environments.

As part of the school decentralization movement in Tennessee, a project focusing on the school as the unit for change was initiated in 1989 with Positive Attitudes in Tennessee Schools (PATS). An important goal in PATS is to build school capacities for transforming school learning environments. This transformation is to be accomplished by means of regular and systematic assessments and school leadership teams engaged in transforming school cultures or climates. The intent is to acknowledge and make more explicit school climate dimensions so that they can be analyzed and, if necessary, strengthened or modified. The intent is to realize a strong positive learning environment, which is linked to school productivity (Deal, 1993; Stockard & Mayberry, 1985).

As a strategy for accomplishing improved learning environments, school climate audits are conducted for participating sites and summarized in report form for use by leadership teams in developing improvement action plans. The audits provide a standardized procedure for generating information that can be portrayed, analyzed, and replicated. As a standardized assessment of school culture, climate audits make it "... possible for any given school to assess its character, evaluate it, and then begin to consider change" (Maehr & Buck, 1993, p. 45). Repeated data collections provide longitudinal information that can be used to analyze patterns of changes over time.



9

References

Aiken, M., & Longford, N. (1986). Statistical modelling issues in school effectiveness studies. <u>Journal of the Royal Statistical Society</u>, Series Λ, 144.

Anderson, C. S. (1982). The search for school climate: A review of the research. Review of Educational Research, 52(3), 368-420.

Anderson, L., et al. (1992). A study of the characteristics and qualities of 'High-Flying' compensatory programs in South Carolina as examined through the framework of the SERVE model for effective compensatory programs. Columbia, SC: University of South Carolina, Department of Educational Leadership and Policies.

Barth, R. S. (1990). Improving school from within. San Francisco: Jossey-Bass.

Bolman, L. G., & Deal, T. E. (1992). <u>Reframing organizations</u>. San Francisco: Jossey-Bass.

Brookover, W. B., & Lezotte, L. W. (1979). <u>Changes in school</u> <u>characteristics coincident with changes in student achievement</u>. East Lansing: Michigan State University, College of Education, Institute for Research on Teaching.

Brown, D. F. (1995, July). Experiencing shared leadership: Teachers' reflections. <u>Journal of School Leadership</u>, 5, 334-355.

Bryson, J. M. (1989). <u>Strategic planing for public and nonpublic organizations</u>. San Francisco: Jossey-Bass.

Butler, E. D. (1990). <u>Learning environment assessment system:</u>
<u>Administrative manual.</u> Memphis, TN: The University of Memphis, Center for Research in Educational Policy.

Butler, E. D., & Alberg, M. J. (1990). <u>The Tennessee School Climate</u> <u>Inventory: A resource manual</u>. Memphis, TN: The University of Memphis, Center for Research in Educational Policy.

Conley, S. (1991). Review of research on teacher participation in school decision making. In G. Grant (Ed.), <u>Review of Research in Education</u>, Vol. 17. Washington, DC: American Educational Research Association.

Cotton, K. (1991). <u>Effective school practices: A research synthesis 1994</u> <u>update</u>. Portland, OR: Northwest Regional Educational Laboratory.

Creemers, R. P. M. (1994). The history, value and purpose of school effectiveness studies. In D. Reynolds, B. P. M. Creeemers, P. S. Nesselrodt, E.



G. Schaffer, S. Stringfield, & C. Teddlie, <u>Advances in school effectiveness</u> research and practice (pp. 9-23). Tarrytown, NY: Pergamon

Deal, T. E. (1993). The culture of schools. In M. Sashkin & H. J. Walberg (Eds.), <u>Educational leadership and school culture</u> (pp. 3-18). Berkeley, CA: McCutchan Publishing Corporation.

Deal, T. E., & Peterson, K. D. (1993). Strategies for building school cultures: Principals as symbolic leaders. In M. Sashkin & H. J. Walberg (Eds.), Educational leadership and school culture (pp. 89-99). Berkeley, CA: McCutchan Publishing Corporation.

Deal, T. E., & Peterson, K. D. (1990). The principal's role in shaping school culture. Washington, DC: U S. Department of Education.

Dimmock, C. (1995, July). Reconceptualizing restructuring for school effectiveness and school improvement. <u>International Journal of Educational Reform, 4</u> (3), 285-300.

Duncan, W. J. (1989). Organizational culture: "Getting a fix" on an elusive concept. Academy of Management Executive, 3, 229-236.

Duttweiler, P. C. (1988) New insights from research on effective schools. <u>Insights on Educational Policy and Practice: Number 4</u>. Austin, TX: Southwest Educational Development Lab. (ERIC Document Reproduction Service No. ED 329 016)

Duttweiler, P. C., & Mutchler, S. E. (1990). <u>Cultural misalignment and emerging paradigms</u>. Austin, TX: Southwest Educational Development Lab. (ERIC Reproduction Service No. ED 329020).

ERIC Clearinghouse on Educational Management. (1984). The culture of an effective school. Eugene, OR: Author.

Firestone, W. A., & Wilson, B. L. (1993). Bureaucratic and cultural linkages: Implications for the principal. In M. Sashkin & H. J. Walberg (Eds.), Educational leadership and school culture (pp. 19-39). Berkeley, CA: McCutchan Publishing Corporation.

Fullan, M. G. (1993). <u>Change forces: Probing the depths of educational</u> reform. New York: Falmer Press.

Fullan, M. G. (1991). <u>The new meaning of educational change</u> (2nd ed.). New York: Teachers College Press.

Fullan, M. G. (1988). Visions that blind. <u>Educational Leadership</u>, 49(5), 19-20.



Hallinger, P., & Murphy, J. (1986). The social context of effective schools. American Journal of Education, 94, 328-355.

Heck, R. H., & Mayor, R. A. (1993). School characteristics, school academic indicators, and student outcomes: Implications for policies to improve school. <u>Journal of Educational Policy</u>, 8, 143-154.

Krug, S. E. (1993). Leadership and culture: A quantitative perspective on school leadership and instructional climate. In M. Sashkin & H. J. Walberg (Eds.), <u>Educational leadership and school culture</u> (pp. 163-178). Berkeley, CA: McCutchan Publishing Corporation.

Lane, J. J., & Epps, E. G. (Eds.). (1992). <u>Restructuring the schools:</u>

<u>Problems and prospects</u>. Berkeley, CA: McCutchan Publishing Corporation.

Leithwood, K. A. (1992). The move toward educational leadership. <u>Educational Leadership</u>, 49(5), 8-12.

Lieberman, A. (Ed.). (1986). <u>Rethinking school improvement:</u> <u>Research, craft, and concept.</u> New York: Teachers College Press.

Lieberman, A. (Ed.). (1990). <u>Schools as collaborative cultures: Creating</u> the future now. New York: Falmer Press

Little, J. W. (1990). Teachers as colleagues. In A. Lieberman (Ed.), Schools as collaborative cultures: Creating the future now (pp. 165-193). New York: Falmer Press

Maehr, M., & Buck, R. (1993). Transforming school culture. In M. Sashkin & H. J. Walberg (Eds.), <u>Educational leadership and school culture</u> (pp. 40 - 57). Berkeley, CA: McCutchan Publishing Corporation.

Maeroff, G. I. (1993). <u>Team building for school change: Equipping teachers for new roles</u>. New York: Teachers College Press.

Malen, B., Ogawa, R. T., & Kranz, J. (1990). What do we know about school-based management? In W. H. Clune & J. F. Witte (Eds.), <u>Choice and control in American education</u>, Vol. 2. New York: The Palmer Press.

Murphy, J., & Hallinger, P. (Eds.). (1993). <u>Restructuring schooling:</u> <u>Learning from ongoing efforts</u>. Newbury Park, CA: Corwin.

Nuttall, A. E., et al. (1989). Differential school effectiveness. International Journal of Educational Research, 13(7), 769-776.

Oakes, J. (1986). <u>Educational indicators: A guide for policy makers</u>. New Brunswick, NJ: Rutgers University, Center for Policy Research in Education.



Oakes, J. (1989). What educational indicators? The case for assessing the school context. <u>Educational Evaluation and Policy Analysis</u>, 11, 181-199.

Phi Delta Kappa. (1980). Why do some urban schools succeed? Bloomington, IN: Author.

Pike, M., & Chandler, S. (1989). <u>Positive Attitudes in Tennessee</u> <u>Schools: Program description</u>. Nashville, TN: Tennessee State Department of Education, Office of Career Development.

Purkey, S. C., & Rutter, R. A. (1987). Effective schools: A review. Elementary School Journal, 83, 427-452.

Reynolds, D., Creeemers, B. P. M., Nesselrodt, P. S., Schaffer, E. G., Stringfield, S., & Teddlie, C. (1994). <u>Advances in school effectiveness research and practice</u>. Tarrytown, NY: Pergamon.

Reynolds, D., et al. (1994). School effectiveness research: A review of the international literature. In D. Reynolds, B. P. M. Creeemers, P. S. Nesselrodt, E. G. Schaffer, S. Stringfield, & C. Teddlie. (1994). <u>Advances in school effectiveness research and practice</u> (pp. 25-51). Tarrytown, NY: Pergamon.

Rossman, G. B., Corbett, H. D., & Firestone, W. A. (1988). <u>Change and effectiveness in schools: A cultural perspective</u>. Albany, NY: State University of New York Press.

Rutter, M. (1980). <u>Changing youth in a changing society</u>. Oxford: Nuffield Provincial Hospital Trust.

Sashkin, M. (1993). The visionary principal: School leadership for the next century. In M. Sashkin & H. J. Walberg (Eds.), <u>Educational leadership and school culture</u> (pp. 75-85). Berkeley, CA: McCutchan Publishing Corporation.

Sashkin, M., & Egermeier, J. (1993). School change models and processes: A review and synthesis of research and practice. Washington, DC: U. S. Department of Education, Office of Educational Research and Improvement.

Sashkin, M., & Sashkin, M. G. (1993). Principals and school cultures: Principals as symbolic leaders. In M. Sashkin & H. J. Walberg (Eds.), Educational leadership and culture (pp. 100-123). San Francisco: McCutchan.

Sashkin, M., & Walberg, H. J. (Eds.). (1993). <u>Educational leadership and</u> school culture. Berkeley, CA: McCutchan Publishing Corporation.

Schein, E. H. (1985). <u>Organizational culture and leadership</u>. San Francisco: Jossey-Bass.



Schlechty, P. C. (1990). Schools for the twenty-first century: The conditions for invention. In A. Lieberman (Ed.), <u>Schools as collaborative</u> cultures: <u>Creating the future now</u> (pp. 233-255). New York: The Falmer Press.

Senge, P. M. (1990). <u>The fifth discipline: The art and practice of the learning organization</u>. New York: Doubleday and Co.

Sergiovanni, T. J. (1993). New sources of leadership authority. In M. Sashkin & H. J. Walberg (Eds.), <u>Educational leadership and school culture</u> (pp. 61-74). Berkeley, CA: McCutchan Publishing Corporation.

Sergiovanni, T. J. (1990). <u>Value-added leadership: How to get</u> <u>extraordinary performance in schools</u>. San Diego: Harcourt Brace Jovanovich.

Sergiovanni, T. J., & Corbally, J. E. (Eds.). (1984). <u>Leadership and organizational culture</u>. Urbana, IL: University of Illinois Press.

Smith, P. B., & Peterson, M. F. (1988). <u>Leadership, organizations and culture</u>. Newbury Park, CA: Sage Publications.

Smith, S. C., & Scott, J. J. (1990). <u>The collaborative school: A work environment for effective instruction</u>. Eugene, OR: University of Oregon, ERIC Clearinghouse on Educational Management.

Stockard, J., & Mayberry, M. (1985). <u>Learning environments: A review of the literature on school environments and student achievement</u>.

Washington, DC: National Institute of Education, Center for Educational Policy and Management.

Teddlie, C. (1994). The study of context in school effects research: History, methods, results, and theoretical implications. In D. Reynolds, B. P. M. Creeemers, P. S. Nesselrodt, E. G. Schaffer, S. Stringfield, & C. Teddlie, Advances in school effectiveness research and practice (pp. 85-110). Tarrytown, NY: Pergamon.

Teddlie, C., & Springfield, S. (1993). <u>School make a difference: Lessons learned from a 10-year study of school effects.</u> New York: Teachers College Press.

Thomson, S. D. (1993). <u>Principals for our changing schools: Knowledge</u> and skill base. Lancaster, PA: Technomic Publishing Co., Inc.

Walberg, H. J. (Ed.). (1979). <u>Educational environments and effects:</u> <u>Evaluation, research, and policy</u>. Berkeley, CA: McCutchan.

Wilson, B. L., & Corcoran, T. B. (1988). <u>Successful secondary schools:</u>

<u>Visions of excellence in American public education</u>. New York: Falmer Press.



Wittrock, M. E. (Ed.). (1986). <u>Handbook of research on teaching</u>. (3rd ed.). New York: MacMillan.

