

DOCUMENT RESUME

ED 456 113

SP 040 196

AUTHOR Cotton, Kathleen
TITLE Research You Can Use To Improve Results. Update of Section 3. Program Report.
INSTITUTION Northwest Regional Educational Lab., Portland, OR.
PUB DATE 2001-06-29
NOTE 40p.
AVAILABLE FROM Northwest Regional Educational Laboratory, 101 S.W. Main Street, Suite 500, Portland, OR 97204. Tel: 503-275-9515.
PUB TYPE Guides - Non-Classroom (055)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Collegiality; *Educational Improvement; *Educational Quality; Elementary Secondary Education; Faculty Development; Feedback; Instructional Leadership; Leadership Responsibility; Questioning Techniques; School Districts; Teacher Competencies; Teacher Effectiveness; Teaching Methods; Teaching Skills; Thinking Skills

ABSTRACT

This document presents research intended to help teachers and administrators improve the quality of instruction. Topics include: (1) classroom (e.g., teachers carefully orient students to lessons, teachers provide clear and focused instruction, teachers routinely provide students feedback and reinforcement regarding their learning progress, teachers review and reteach as necessary to help all students master learning materials, teachers use validated strategies to develop students' critical and creative thinking skills, and teachers foster the development of self-directed learning skills); (2) school (leaders undertake school restructuring efforts as needed to attain agreed upon goals for students, strong leadership guides the instructional program, administrators and other leaders continually strive to improve instructional effectiveness, and administrators and other leaders engage staff in professional development and collegial learning activities); and (3) district (district leaders and staff encourage, support, and monitor school improvement efforts). Each of the three sections provides a listing of key references. (Contains approximately 370 bibliographic references.) (SM)



ED 456 113

**RESEARCH YOU CAN USE TO IMPROVE RESULTS
UPDATE OF SECTION 3**

Task 2 – OERI Event No. 1
Deliverable 16212

June 29, 2001

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

J.D. Kirkpatrick

Prepared by

Kathleen Cotton

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

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 originating it.
- 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.

School Improvement Program

Robert E. Blum, Director

**Northwest Regional Educational Laboratory
101 S.W. Main Street, Suite 500
Portland, Oregon 97204**

SP040196

Research You Can Use to Improve Results
Update of Section 3

Kathleen Cotton
June 2001

3.0 INSTRUCTION AND INSTRUCTIONAL IMPROVEMENT

3.1 Classroom

3.1.1 Teachers Carefully Orient Students to Lessons

Teachers:

- a. Help students get ready to learn by directing their attention to key elements of the upcoming lesson.
- b. Explain lesson objectives in simple, everyday language and refer to them throughout lessons to maintain focus.
- c. Post or hand out learning objectives to help students keep a sense of direction and check periodically to assure that objectives are understood.
- d. Explain the relationship of a current lesson to previous study, calling attention to key concepts or skills previously covered.
- e. Arouse students' interest and curiosity about the lesson content by relating it to things of personal relevance to them.
- f. Pose questions that will train students' attention on relevant information in the lesson.
- g. Challenge and inspire students to learn, particularly at the start of difficult lessons. They make certain that students know in advance what is expected and are ready to learn.
- h. Use techniques such as advance organizers, study questions, prediction, concept mapping and computer simulations, to prepare students for learning activities.
- i. Make students aware that they are expected to contribute to classroom discussions and other participatory activities.

Key references Block and Burns (1976); Bloom (1976); Brophy (1987, 2000); Brophy and Good (1986); Cavalier and Klein (1998); Corder (1999); Ellis and Worthington (1994); Evertson (1986, 1995); Gersten and Carnine (1986); Good (1984); Good and Grouws (1979a,b); Heistad (1999); Kooy (1992); Lumpkins, Parker, and Hall (1991); McGinley and Denner (1985); Mitchell (1987); Molina, ET AL. (1997); Pressley, et al. (1997); Porter and Brophy (1988); Rosenshine (1976, 1983); Rosenshine and Stevens (1986); Slavin (1994a); Snapp and Glover (1990); Stahl and Clark (1987); Stallings (1985c); Streeter (1986); Tomic (1989); Weade and Evertson (1988) Wolfe (1998)

3.1.2 Teachers Provide Clear and Focused Instruction

Teachers:

- a. Review lesson activities, give clear written and verbal directions, emphasize key points and instructions, and check students' understanding.
- b. Give lectures and demonstrations in a clear and focused manner.
- c. Take note of learning style differences among students and, when feasible, identify and use learning strategies and materials that are appropriate to different styles.
- d. Give students plenty of opportunity for guided and independent practice with new concepts and skills, including hands-on learning activities
- e. Provide instruction in strategies for learning and remembering/applying what they have learned, as well as instruction in test-taking skills.
- f. Use validated strategies to develop students' higher-level thinking skills.
- g. Select problems and other academic tasks that are well matched to lesson content so student success rate is high. They also provide varied and challenging seatwork activities.
- h. Provide computer-assisted instructional activities which supplement and are integrated with teacher-directed learning.

Key references

Akpan and Andre (1999); Bain, Lintz, and Word (1989); Behets (1997); Beidel, Turner, and Taylor-Ferreira (1999); Bennett (1991); Brophy (1979); Brophy and Good (1986); Cawelti (1999); Chilcoat (1989); Chin and Brown (2000); Corno and Snow (1986); Crawford, et al. (1975); Dunn (1984); Ellis and Worthington (1994); Evertson (1989); Fraenkel (1995); Gall, et al. (1990); Gersten, et al. (1984); Gersten and Carnine (1986); Geiser (1999); Gleason, Carnine, and Boriero (1990); Good and Grouws (1977, 1979a,b); Haller, Child, and Walberg (1988); Heistad (1999); Kulik and Kulik (1987); Kushman (1997); Levine (1982); Levine and Stark (1982); Madden, et al. (1993); Medley (1979); Metcalf (1992); Metcalf and Cruickshank (1991); Mevarech and Rich (1985); Naffziger, Steele, and Varner (1998) Nickerson (1988); Okey (1985); Paradise and Block (1984); Paris, Oka, and DeBritto (1983); Porter and Brophy (1988); Rosenshine (1979, 1983); Rosenshine and Stevens (1986); Rutter, et al. (1979); Samson (1985); Saracho (1984); Scruggs, White, and Bennion (1986); Sidelinger (1997); Slavin (1994a); Snyder, et al. (1991); Stallings (1985a); Stennett (1985); Wang, Haertel, and Walberg (1993-94); Waxman, et al. (1985); Weade and Evertson (1988); Weinstein and Meyer (1986); Weinstein, et al. (1988-89); Woodward, Carnine, and Gersten (1988)

3.1.3 Teachers Routinely Provide Students Feedback and Reinforcement Regarding their Learning Progress

Teachers:

- a. Give students immediate feedback on their in-class responses and written assignments to help them understand and correct errors; the primary purpose is to inform rather than evaluate.
- b. Acknowledge correct responses and indicate that incorrect ones are incorrect during recitations and on assignments and tests. They do not overcorrect, knowing that students will be reluctant to respond if corrected constantly.
- c. Relate the specific feedback they give to unit goals or overall course goals.
- d. Give praise and other verbal reinforcements for correct answers and for progress in relation to past performance; however, teachers use praise sparingly and avoid the use of unmerited or random praise.
- e. Make use of peer evaluation techniques (e.g., in written composition) as a means of providing feedback and guidance to students.
- f. Provide computer-assisted instructional activities that give students immediate feedback regarding their learning performance.
- g. Assign homework regularly to students in grade four and above, and see that it is corrected and returned promptly—either in class by the students or by the teacher.
- h. Use peer tutoring strategies that include training students to provide each other feedback and reinforcement.

Key references Brophy (1980, 1987); Brophy and Good (1986); Broughton (1978); Cannella (1986); Cohen, Kulik, and Kulik (1982); Colvin (2000); DiPardo and Freedman (1988); Duke and Henniger (1998); Fuchs, et al. (1996); Fuchs, Fuchs and Kazdan (1999); Gardner (1998); Gettinger (1983); Gorrell and Keel (1986); Gottfried and Gottfried (1991); Hawkins, Doueck, and Lishner (1988); Hawley, et al. (1984); Hano (1999); Kastr, Tollefson, and Gilbert (1987); Kearns (1988); Kohn (1994); Kulik and Kulik (1987, 1988); Lalley (1998); Lysakowski and Walberg (1981); Madden, et al. (1993); McCarthy, Webb, and Hancock (1995); Mortimore, et al. (1988); Mortweet, et al. (1999); Page (1992); Porter and Brophy (1988); Rosenshine and Stevens (1986); Rupe (1986); Sammons, Hillman, and Mortimore (1995); Schunk (1983, 1984a,b); Schunk and Swartz (1993); Slavin (1979a,b); Stennett (1985); Stevens (1985); Teddlie, Kirby, and Stringfield (1989); Tenenbaum and Goldring (1989)

3.1.4 Teachers Review and Reteach as Necessary to Help All Students Master Learning Material

Teachers:

- a. Introduce new learning material as quickly as possible at the beginning of the year or course, with a minimum of review or reteaching of previous content. They review key concepts and skills thoroughly but quickly.
- b. Use different materials and examples for reteaching than those used for initial instruction; reteaching is more than a “rehash” of previously taught lessons.
- c. Use engaging materials for remediation, such as “talking software” and reading content appropriate to students’ age/grade level.
- d. Reteach priority lesson content until students show they have learned it.
- e. Provide regular, focused reviews of key concepts and skills throughout the year to check on and strengthen student understanding.
- f. Select computer-assisted instructional activities that include review and reinforcement components.
- g. Address learning style differences during review and reteaching.
- h. Seek, evaluate, and use resources intended specifically for review/reteaching of key lessons (e.g., in mathematics).

Key references Bain, Lintz, and Word (1989); Block (1983); Block and Burns (1976); Block, Efthim, and Burns (1989); Bloom (1976); Brophy (1986b, 1987, 1988b); Brophy and Good (1986); Burns (1979); Clark and Nelson (1993); Colvin (2000); Dalton and Hannafin (1988); Darter and Phelps (1990); Dewalt and Rodwell (1988); Dillashaw and Okey (1983); Gillingham and Guthrie (1987); Good (1984); Guskey and Gates (1986); Johnson, Gersten, and Carnine (1987); Kinzie, Sullivan, and Berdel (1988); Rosenshine (1976, 1979, 1983); Rosenshine and Stevens (1986); Slate, Algozzine, and Lockavitch (1998); Wolf and Supon (1994)

3.1.5 Teachers Use Validated Strategies to Develop Students’ Critical and Creative Thinking Skills

Teachers:

- a. Help students to understand that critical and creative thinking are important for success in our rapidly changing world.
- b. Provide instruction in study skills, such as paraphrasing, outlining, guided note-taking; developing cognitive maps, and using advance organizers.
- c. Teach strategies for problem solving, decisionmaking, exploration, classification, and hypothesizing, and provide students opportunities to practice and refine these skills.
- d. Provide real-world, hands-on activities whereby students learn and apply critical and creative thinking skills.

- e. Work with older students to develop metacognitive skills, so that they can examine their own thinking patterns and learning processes and learn to make changes as needed.
- f. Ask higher-order questions and give students generous amounts of time to respond.
- g. Use instructional strategies such as probing, redirection, and reinforcement to improve the quality of student responses.
- h. Incorporate computer-assisted instructional activities, including educational web sites, into building thinking skills such as verbal analogy, logical reasoning, induction/deduction, elaboration, and integration.
- i. Provide scientific inquiry and creative problem-solving activities that engage students in framing and posing questions and finding answers through investigation.
- j. Maintain a supportive classroom environment in which students feel safe experimenting with new ideas and approaches.
- k. Provide activities whereby secondary students learn to confront and analyze their own assumptions and biases.
- l. May use specific thinking skill development programs and/or infuse thinking skill instruction into content-area lessons, since both approaches have been shown to be effective.

Key references Bangert-Drowns and Bankert (1990); Barba and Merchant (1990); Baum (1990); Bransford, et al. (1986); Brophy (2000); Casey, et al. (1995); Chang and Barufaldi (1997); Chang, Lin, and Chen (1998); Chang and Mao (1998, 1999); Chin and Brown (2000); Crump, Schlichter, and Palk (1988); Fields (1995); Fluellen (1999); Freseman (1990); Gall, et al. (1990); Haller, Child, and Walberg (1988); Hansler (1985); Hermstein, et al. (1986); Hoek, van den Eeden, and Terwel (1997); Horton and Ryba (1986); Huber, Smith and Shotsberger (2000);Hudgins and Edelman (1986); Kagan (1988); Levine and Omstein (1993); Lindmark, et al. (1996); Lucangeli, Galderisi, and Cornoldi (1995); Maqsud (1998); Matthews (1989); Mid-continent Regional Educational Laboratory (1985); Molina, et al. (1997); Norris (1985); Obach and Moely (1993); Pearson (1982); Pogrow (1988); Reis, Gentry and Park (1995); Riding and Powell (1986, 1987); Ristow (1988); Robinson (1987); Rodd (1999); Sarapuu and Adojaan (1999); Snapp and Glover (1990);Shayer (1997); Sheldon (1999); Sternberg and Bhana (1986); Sternberg, Torff and Grigorenko (1998); Sweeney, et al. (1999); Tenenbaum (1986); Williamson and Smoak (1999); Wong (1985)

3.1.6 Teachers Use Effective Questioning Techniques to Build Basic and Higher-Level Skills

Teachers:

- a. Make use of classroom questioning to engage student interaction and to monitor student understanding.
- b. Structure questions so as to focus students' attention on key elements in the lesson.

- c. Pose questions at the beginning of lessons or reading activities for students to consider as they read or listen to new material.
- d. Pose questions to both volunteering and nonvolunteering students.
- e. Ask a combination of lower-cognitive (fact and recall) and higher-cognitive (open-ended and interpretive) questions to check students' understanding and stimulate their thinking during classroom recitations.
- f. Ask lower-cognitive questions that most students will be able to answer correctly when helping students to acquire factual knowledge.
- g. Ask a majority of higher-cognitive questions (50 percent or more) of students above the primary grades during classroom recitations.
- h. Allow generous amounts of "wait-time" when questioning students—at least three seconds for lower-cognitive questions and more for higher-cognitive ones.
- i. Continue to interact with students whose initial responses are inaccurate or incomplete, probing their understanding and helping them to produce more thoughtful answers.
- j. Make certain that both faster and slower learners have opportunities to respond to higher cognitive questions and are given sufficient wait-time.
- k. Avoid asking vague questions, trick questions, and questions too abstract for the developmental level of the students.

Key references Atwood and Wilen (1991); Ayaduray and Jacobs (1997); Barnette, et al. (1995); Brophy (1986b, 1987, 2000); Brophy and Good (1986); Brualdi (1998); Carr (1998); Chin and Brown (2000); Ciardiello (1986); Cotton (1989a); Ellis (1993); Gall (1984); Good (1984); Honea (1982); Hoxmeier (1986); Johnston, Markle, and Haley-Oliphant (1987); Koufetta-Menicou and Scaife (2000); Makin (1996); Mansfield (1996); Osman and Hannafin (1994); Redfield and Rousseau (1981); Riley (1986); Samson, et al. (1987); Slavin (1994a); Stevens (1985); Swift and Gooding (1983); Swift, Swift, and Gooding (1984); Tobin and Capie (1980, 1981); van Zee and Minstrell (1997); Winne (1979); Yei, Wang, and Huang (1998)

3.1.7 Teachers Foster the Development of Self-Directed Learning Skills

Teachers:

- a. Provide, for elementary students, age-appropriate experience of self-direction by offering a range of choices of learning activities and materials.
- b. Help students to understand that developing the ability to learn independently will increase the likelihood that they will be successful in school and in the workplace.
- c. Help students to develop critical thinking and other higher-order skills, as detailed above.
- d. Involve students in hands-on projects of personal relevance to them that provide practice in applying what they have learned.
- e. Assume, with older students, the roles of guide, facilitator, and resource person in project-based learning activities that are primarily controlled by the students.

- f. Expect some initial apprehension from students who are unaccustomed to assuming responsibility for their own learning, and assure them that guidance will be available to them throughout the process.
- g. Teach the steps of self-directed learning and give students examples of—and practice in—writing goals and objectives and designing learning plans.
- h. Provide instruction in Internet search skills and in the ways library and database information is organized, and offer learning experiences in accessing, managing, and utilizing information.

Key references: Butler (1997); Caissy (1986); Carr (1991); Cotton (1998); Davalos and Haensly (1997); Dickinson (1995); Hancock (1993); Karp (1991); Katz (1998); Knowles (1990); Kopacsi and Hochwald (1998); Obach and Moely (1993); Paterson (1996); Pierce (1998); Pintrich and DeGroot (1990); Ridley, McCombs, and Taylor (1994); Rosenshine (1996); Stiller and Ryan (1992); Thomas, Strage, and Curley (1988); Williams (1992); Woodle, Hartsoe, and Taylor (1995); Woolnough, McLaughlin, and Jackson (1999); Yamazon (1999)

3.2 School

3.2.1 Leaders Undertake School Restructuring Efforts as Needed to Attain Agreed-Upon Goals for Students

Administrators and other leaders:

- a. Redevelop curriculum, instruction, student assessment, and teacher evaluation as needed to align with state standards
- b. Review school operations in light of agreed-upon goals for student performance.
- c. Work with school-based management team members to identify any needed changes (in organization, curriculum, instruction, scheduling, etc.) to support attainment of goals for students.
- d. Analyze data on student performance and use findings to inform improvement decisions.
- e. Identify the kinds of staff development needed to enable school leaders and other personnel to bring about desired changes.
- f. Study restructuring efforts conducted elsewhere for ideas and approaches to use or adapt. They pay particular attention to kinds of structural changes that have met with considerable success in improving student performance: multi-age grouping, block scheduling, team teaching, looping, class size reduction, detracking, responsive professional development programs, and school-based decision making.
- g. Focus efforts on factors identified by research as critical to successful restructuring: results orientation, high standards, effective teaching practices, parent involvement, professional development, and use of technology.
- h. Consider school contextual factors when undertaking restructuring efforts —factors such as availability of resources, nature of incentives and disincentives, linkages within

the school, school goals and priorities, factions and stresses among the staff, current instructional practices, and legacy of previous innovations.

- i. Involve staff, parents, community members, and students in providing input and making decisions.
- j. Pursue both breadth and depth in the implementation of agreed-upon changes; changes are schoolwide and fundamentally alter the way schooling is carried out.

Key references Cawelti (1997); Education Commission of the States (1995); Education Trust (1999); Fortune, Williams, and White (1992); Fouts (1999); Fullan (1993); George, Grissom, and Just (1996); Johnson (1997); Kentucky SDE (2000); Lee and Smith (1993, 1995, 1996); Leithwood (1994); Lewis (1989); Lewis, Williams, and Cassidy (1998); McCarthy and Still (1993); McPartland, et al. (1998); Murphy and Hallinger (1993); Newmann, King, and Rigdon (1997); Prestine (1993); Prestine and Bowen (1993); Reed (1998); Smith and Lee (1996); Wohlstetter and Mohrman (1996)

3.2.2 Strong Leadership Guides the Instructional Program

Administrators and other instructional leaders:

- a. Believe that all students can learn and that the school makes the difference between success and failure.
- b. Emphasize learning as the most important reason for being in school; public speeches and writings emphasize the importance and value of high achievement.
- c. Have a clear understanding of the school's mission and are able to state it in direct, concrete terms. They establish an instructional focus that unifies staff.
- d. Seek, recruit, and hire staff members who will support the school's mission and contribute to its effectiveness.
- e. Foster capacity development and high levels of personal commitment to school goals on the part of school staff.
- f. Know and can apply validated teaching and learning principles; they model effective teaching practices for staff as appropriate.
- g. Know educational research, emphasize its importance, share it, and foster its use in problem solving.
- h. Foster and facilitate discussion of instructional issues among staff.
- i. Seek out innovative curricular programs, observe these, acquaint staff with them, and participate with staff in discussions about adopting or adapting them.
- j. Set expectations for curriculum quality through the use of standards and guidelines. They periodically check the alignment of curriculum with instruction and assessment, establish curricular priorities, and monitor the implementation of curriculum.
- k. Check student progress frequently, relying on explicit performance data. They make results public, and work with staff to set standards, use them as points of comparison, and address discrepancies.

- l. Expect all staff to meet high instructional standards. They secure staff agreement on a schoolwide instructional model, make classroom visits to observe instruction, focus supervision activities on instructional improvement, and provide and monitor staff development activities.
- m. Identify and secure resources—financial, human, time, materials, and facilities—for professional development.
- n. Provide professional development activities that are congruent with educational research and responsive to staff's stated needs.
- o. Extend considerable autonomy to teachers and encourage them to innovate.
- p. Communicate the expectation that instructional programs will improve over time. They provide well-organized, systematic improvement strategies; give improvement activities high priority and visibility; and monitor implementation of new practices.
- q. Involve the full staff in planning implementation strategies. They set and enforce expectations for participation, ensure that others follow through on commitments, and rally support from the different constituencies in the school community.
- r. Model the beliefs and behaviors they seek to instill in others.

Key references Andrews and Soder (1987); Bamburg and Andrews (1991); Beck and Murphy (1996); Berman and McLaughlin (1979); Biester, et al. (1984); Bossert (1988b); Brookover (1979, 1981); Brookover and Lezotte (1979); Brundage (1979); Cawelti (1987, 1997); Cohen (1994); Cohen, et al. (1989); Corbett, Dawson, and Firestone (1984) Connell (1999); Crisci, et al. (1988); Crone and Teddlie (1995); DeBevoise (1984); Druian and Butler (1987); Eberts and Stone (1988); Edmonds (1979a); Emrick (1977); Everson, et al. (1986); Fullan (1993); Gaziel (1995); George, Grissom, and Just (1996); Glasman (1984); Good and Brophy (1986); Gullatt and Lofton (1996); Gurr (1997); Hallinger, Bickman, and Davis (1989); Hallinger and Heck (1996); Hawley, et al. (1984); Heck (1992); Hess (1999); High and Achilles (1986); Hoy, Hannum, and Tschannen-Moran (1998); Johnson, et al. (2000); Krug (1992); Larsen (1987); Leithwood and Jantzi (1999); Leithwood and Montgomery (1982, 1985); Levine and Lezotte (1990); Little (1982); Louis and Miles (1990); Madden, Lawson, and Sweet (1976); Newmann, King, and Rigdon (1997); Ogawa and Hart (1985); Pavan and Reid (1991, 1994); Peterson, Gok, and Warren (1995); Purkey and Smith (1983); Rosenholtz (1985, 1989a,b); Sammons, Hillman, and Mortimore (1995); Scheurich (1998); Schmitt (1990); Sheppard (1996); Terry (1996); Venezky and Winfield (1979); Weber (1971); Wendel, Hoke, and Joekel (1996)

3.2.3 Administrators and Other Leaders Continually Strive to Improve Instructional Effectiveness

Administrators and other leaders:

- a. Expect that educational programs will be changed so that they work better; they are never complacent about student achievement.
- b. Make certain all stakeholders understand that that pursuit of continuous improvement does not mean that past practices were bad. They communicate to all parties that “you don’t have to be bad to get better.”
- c. Regard themselves and one another as responsible for students’ academic performance.
- d. Direct school improvement efforts at clearly defined student achievement and/or social behavior goals; they secure schoolwide and community understanding and agreement about the purpose of improvement efforts.
- e. Work with staff and school-based management groups to develop improvement goals based on review of school performance data; the goals then drive planning and implementation.
- f. Review programs and practices shown to be effective in other school settings for their potential in helping to meet school needs.
- g. Give teachers latitude to experiment with innovations and determine what works best.
- h. Specify clearly the roles and responsibilities for the various aspects of the school improvement effort.
- i. Check implementation carefully and frequently, note and publicize progress, and modify activities to make things work better.
- j. Secure and earmark resources to support improvement activities, acquire resources from many sources including the community, and make resource allocations based on instructional priorities.
- k. Refine assessments, so that they measure, accurately and over time, what students know and can do.
- l. Renew or redirect the improvement focus as goals are achieved, report and celebrate success, and work with staff to establish new goals.
- m. Allow adequate time for innovations to become integrated into the life of the school, and provide ongoing support to the full staff during the implementation process.
- n. Provide periodic events to acknowledge and celebrate successes and to renew interest and energy for continued school improvement work.

Key references Bamburg and Andrews (1989, 1991); Bartell (1990); Beck and Murphy (1996); Berman and McLaughlin (1979); Biester, et al. (1984); Bossert (1988b); Bossert, et al. (1982); Boyd (1992); Brookover (1979); Brundage (1979); Cawelti (1997); Ceperley (1999); Costello and Chapin (2000); David (1989); Deal and Peterson (1993); Education Commission of the States (1995); Edmonds (1979a,b); Emrick (1977); Everson, et al. (1986); Evertson (1986); Fullan (1992, 1993); Gall, et al. (1984); Good and Brophy (1986); Goodwin (2000); Hallinger and Hausman (1993); Hawley, et al. (1984); Hopkins (1999); Hord (1990, 1992a, 1997, 1998); Hord and Huling-Austin (1986); Johnson and Asera (1999); Langer (1999); Leithwood and Montgomery (1982); Levine (1990); Levine and Lezotte (1990); Little (1982, 1986); Louis and

King (1993); Louis and Miles (1990); Madden, Lawson, and Sweet (1976); McCallum (1999); Murphy and Hallinger (1993); Newmann, King, and Rigdon (1997); Oakes (1989); Pavan and Reid (1994); Purkey and Smith (1983); Rosenholtz (1985, 1989a,b); Rubenstein and Wodatch (2000); Scheurich, 1998; Schrag (1999); Snell (2000); Sparks (1983, 1986); Speck (1996); Stringfield and Teddlie (1988); Townsend (1997); Venezky and Winfield (1979); Weber (1971); Weller and Weller (1997, 1999); Wolf and White (2000)

3.2.4 Administrators and Other Leaders Engage Staff in Professional Development and Collegial Learning Activities

Administrators and other leaders:

- a. Make resources—time, money, people, facilities, and materials—available to support ongoing programs of professional development for staff.
- b. Offer some professional development activities during the regular work day.
- c. Solicit and use staff input for the content of professional development activities and encourage them to assume leadership roles in planning and carrying out some of the activities.
- d. Provide activities that enhance teachers' capabilities in the major areas of subject content, teaching strategies, reflective practice, application of research, collaborative skills, use of technology to support learning
- e. Review research findings to identify effective staff development approaches for improving student performance.
- f. Recognize that adults, like children, have different learning styles and provide diverse kinds of activities in response to these differences.
- g. Arrange for staff involvement in group staff development activities at the building and district levels.
- h. Make certain that skill-building activities are delivered over time, so that staff have the opportunity to practice their new learnings, report outcomes, and adjust strategies.
- i. Build into staff development activities the opportunity for participants to share ideas and concerns regarding the use of new programs and practices.
- j. Provide or arrange for ongoing technical assistance for school staff as they pursue school improvement activities.
- k. Provide follow-up activities to ensure that newly acquired knowledge and skills are applied in the classroom.
- l. Make resources available for staff to participate in individual professional development activities—university courses, professional conferences, out-of-district workshops, etc.—to enhance job-related knowledge and skills.
- m. Create structures for staff members to learn from one another through peer observation/feedback and other collegial learning activities.
- n. Work to establish a norm of collegiality—a professional learning community in which staff members will routinely learn and work together to improve the instructional program.

- o. Evaluate the impact of professional development on teaching practice and student learning and use findings to guide the development of future professional development activities.

Key references Adey (1997); Agado and Ovando (1998); Bamburg and Andrews (1991); Beck and Murphy (1996); Bennett (1987); Block (1983); Boyd (1992); Boyd and Hord (1994); Butler (1989, 1992); Cawelti (1997); Corcoran (1985); daCosta (1995); David (1989); Deal and Peterson (1993); Eubanks and Levine (1983); Everson, et al. (1986); Evertson (1986); Fullan (1992, 1993); Gage (1984); Gall, et al. (1984); Gall and Renchler (1985); Harwell, et al. (2000); Hawley, et al. (1984); Hord (1997); Hord and Huling-Austin (1986); Hoy, Hannum, and Tschannen-Moran (1998); Joyce (1987); Joyce and Showers (1980, 1995); Joyce, et al. (1989); Kohler, Crilley, and Shearer (1997); Korinek, Schmid, and McAdams (1985); Langer (1999); Lee and Smith (1996); Levine, Levine, and Eubanks (1987); Levine and Lezotte (1990); Little (1982, 1986); Loucks-Horsley, et al. (1987); Louis and King (1993); Louis, Marks, and Kruse (1996); Louis and Miles (1990); March, et al. (1993); Murphy and Hallinger (1993); Newmann and Wehlage (1995); Oakes (1989); Peterson (1997); Rosenholtz (1985, 1989a,b); Rubenstein and Wodatch (2000); Sammons, Hillman, and Mortimore (1995); Slavin and Fashola (1998); Snell (2000); Sparks (1983, 1986); Sparks and Loucks-Horsley (1990); Speck (1996); Stevenson (1987); Wade (1984-85); Warren and Muth (1995); Weathersby and Harkreader (1999); WestEd (2000); Wohlstetter and Mohrman (1996)

3.3 District

3.3.1 District Leaders and Staff Encourage, Support, and Monitor School Improvement Efforts

District leaders and staff:

- a. Provide both pressure for continuous school improvement and resources—time, money, materials, people, and facilities—to facilitate improvement.
- b. Monitor both the implementation of improvement programs and the achievement and behavioral outcomes produced by these programs. Provide advice, clarification, technical feedback and support services.
- c. Assure that resources are focused on the attainment of district goals and priorities and connected to findings from ongoing monitoring of student performance.
- d. Work with schools to align curriculum to standards and assessments.
- e. Engage parents in community members in development of district plans and keep them informed about program implementation and outcomes.

- f. Delegate much of the responsibility for school improvement to principals and school site management groups, while at the same time providing guidance and support for school improvement efforts.
- g. Acquaint site management groups with promising practices from inside and outside the district, encourage their use, and work with building staffs to implement practices selected.
- h. Provide principals and school staffs ongoing programs of staff development focused on strengthening instructional and leadership skills; some district-sponsored activities should be held at school sites. Strongly encourage school personnel to pursue other professional development activities as well.
- i. Do not accept the low performance of some schools as “inevitable.” Rather they note and take action to address such problems.
- j. Celebrate achievements and improvements, especially in previously low-performing schools.
- k. Protect schools from political or economic turbulence which might disrupt classroom instruction.

Key references Berman and McLaughlin (1979); Biester, et al. (1984); Boone (1992); Buechler (2000); Corbett and Wilson (1992); David (1989); Drury (1999); Elmore and Burney (1997); Everson, et al. (1986); Ferguson and Nochelski (1996); Fullan and Watson (2000); George, Grissom, and Just (1996); Gersten, Carnine, and Zoref (1986); Hord (1992b); Huberman and Miles (1984a); Jackson and Crawford (1991); LaRocque and Coleman (1988); Levine and Lezotte (1990); Levine and Stark (1982); Louis and Miles (1990); Manley (1996); Massey (2000); Miller, Smey-Richman, and Woods-Houston (1987); Murphy, et al. (1987); Murphy and Hallinger (1993); Pajak and Glickman (1987); Peterson, Murphy, and Hallinger (1987); Purkey and Smith (1983); Schlechty (1985); Slavin and Fashola (1998); Spillane (1996); Stein (1998); Stringfield (1996); Wagstaff, et al. (1998); Weathersby and Harkreader (1999); WestEd (2000); Wilson and Corcoran (1988); Wohlstetter and Mohrman (1996)

See also See 1.3.3—District Policies Supporting Excellence and Equity

BIBLIOGRAPHY

- Adey, P.S. *Factors Influencing Uptake of a Large Scale Curriculum Innovation*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, April 1997 (ED 408 672).
- Agado, G.A., and Ovando, M.N. *Enhancing Student Performance through Staff Development in Successful Border Schools*. Paper presented at the Annual Meeting of the University Council for Educational Administration, St. Louis, MO, October 1998 (ED 427 396).
- Akpan, J.P., and Andre, T. "The Effect of a Prior Dissection Simulation on Middle School Students' Dissection Performance and Understanding of the Anatomy and Morphology of the Frog." *Journal of Science Education and Technology* 8/12 (June 1999): 107-121.
- Andrews, R.L., and Soder, R. "Principal Leadership and Student Achievement." *Educational Leadership* 44/6 (March 1987): 9-11.
- Atwood, V.A., and Wilen, W.W. "Wait Time and Effective Social Studies Instruction: What Can Research in Science Education Tell Us?" *Social Education* 55/3 (March 1991): 179-181.
- Ayaduray, J., and Jacobs, G.M. "Can Learner Strategy Instruction Succeed? The Case of Higher Order Questioning and Elaborated Responses." *System* 25/4 (December 1997): 561-570.
- Backes, J.; Ralston, A.; and Ingwalson, G. "Middle Level Reform: The Impact on Student Achievement." *Research in Middle Level Education Quarterly* 22/3 (Spring 1999): 43-57
- Bain, H.; Lintz, M.; and Word, E. *A Study of First Grade Effective Teaching Practices from the Project STAR Class Size Research. A Study of Fifty Effective Teachers Whose Class Average Gain Scores Ranked in the Top 15% of Each of Four School Types in Project STAR*. Nashville, TN: Tennessee State Department of Education; Tennessee State University, 1989 (ED 321 887).
- Bamburg, J., and Andrews, R. *Putting Effective Schools Research to Work: The Process of Change and the Role of the Principal*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, March 1989.
- Bamburg, J.D., and Andrews, R.L. "School Goals, Principals and Achievement." *School Effectiveness and School Improvement* 2/3 (1991): 175-191.
- Bangert-Drowns, R.L., and Bankert, E. *Meta-Analysis of Effects of Explicit Instruction for Critical Thinking*. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA, April 1990 (ED 328 614).
- Barba, R.H., and Merchant, L.J. "The Effects of Embedding Generative Cognitive Strategies in Science Software." *Journal of Computers in Mathematics and Science Teaching* 10/1 (Fall 1990): 59-65.
- Barnette, J.J.; Orletsky, S.; Sattes, B.; and Walsh, J. *Wait-Time: Effective and Trainable*. Charleston, WV: Appalachia Educational Laboratory, April 1995 (ED 383 706).
- Bartell, C.A. "Outstanding Secondary Principals Reflect on Instructional Leadership." *The High School Journal* 73/2 (December-January 1990): 118-128.
- Baum, R. "Finishing Touches—10 Top Programs." *Learning* 18/6 (February 1990): 51-55.

- Beck, L.G., and Murphy, J. *The Four Imperatives of a Successful School*. Thousand Oaks, CA: Corwin Press, 1996.
- Behets, D. "Comparison of More and Less Effective Teaching Behaviors in Secondary Physical Education." *Teaching and Teacher Education* 13/2 (February 1997): 215-224.
- Beidel, D.C.; Turner, S.M.; and Taylor-Ferreira, J.C. "Teaching Study Skills and Test-Taking Strategies to Elementary School Students." *Behavior Modification* 23/4 (October 1999): 30-46.
- Belcheir, M.M.; Armstrong, J.; and McKinnon, E. *Instructional Practices: Student Preferences, Teacher Use, and the Gaps Between. Research Report 98-03*. Boise, ID: Boise State University, Office of Institutional Assessment, July 1998. (ED 423 805).
- Bennett, B.B. *The Effectiveness of Staff Development Training Practices: A Meta-Analysis. Dissertation*. Eugene, OR: Division of Teacher Education and the Graduate School of the University of Oregon, 1987.
- Bennett, J.P. "Effectiveness of the Computer in the Teaching of Secondary School Mathematics: Fifteen Years of Reviews of Research." *Educational Technology* 31/8 (August 1991): 44-48.
- Berman, P., and McLaughlin, M. *An Exploratory Study of School District Adaptation*. Santa Monica, CA: Rand Corporation, 1979.
- Biester, T.W.; Kruss, J.; Meyer, F.; and Heller, B. *Effects of Administrative Leadership on Student Achievement*. Philadelphia, PA: Research for Better Schools, 1984 (ED 244 348).
- Block, A.W. *Effective Schools: A Summary of Research. Research Brief*. Arlington, VA: Educational Research Service, 1983 (ED 240 736).
- Block, J.H., and Burns, R.B. "Mastery Learning." In *Review of Research in Education, Volume 4*, edited by L.S. Schulman. Itasca, IL: F.E. Peacock, 1976, 3-49.
- Block, J.H.; Efthim, H.E.; and Burns, R.B. "How Well Does Mastery Learning Work?" In *Building Effective Mastery Learning Schools*. New York, NY: Longman, 1989.
- Bloom, B.S. *Human Characteristics and School Learning*. New York, NY: McGraw-Hill, 1976.
- Boone, M. *The Impact of Leadership Behavior of the Superintendent on Restructuring Rural Schools*. Paper presented at the Annual Conference of the National Rural Education Association, Traverse City, MI, October 1992 (ED 354 115).
- Bossert, S.T. "School Effects." In *Handbook of Research on Educational Administration*, edited by N.J. Boyan. New York, NY: Longman, 1988b, 341-352.
- Bossert, S.T.; Dwyer, D.C.; Rowan, B.; and Lee, G.V. "The Instructional Management Role of the Principal." *Educational Administration Quarterly* 18/3 (Summer 1982): 34-64.
- Boyd, V. "Creating a Context for Change." *Issues . . . about Change* 2/2 (Spring 1992): entire issue.
- Boyd, V., and Hord, S.M. *Principals and the New Paradigm: Schools As Learning Communities*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA, April 1994 (ED 373 428).
- Bransford, J.D.; Burns, M.S.; Delclos, V.R.; and Vye, N.J. "Teaching Thinking: Evaluating Evaluations and Broadening the Data Base." *Educational Leadership* 44/2 (October 1986): 68-70.

- Brookover, W.B. *Effective Secondary Schools*. Philadelphia, PA: Research for Better Schools, 1981 (ED 231 088).
- Brookover, W.B. *School Social Systems and Student Achievement: Schools Can Make a Difference*. New York, NY: Praeger, 1979.
- Brookover, W.B., and Lezotte, L.W. *Changes in School Characteristics Coincident with Changes in Student Achievement*. East Lansing, MI: Michigan State University, College of Urban Development, 1979 (ED 181 005).
- Brophy, J. *Teaching. Educational Practices Series – 1*. Geneva, Switzerland: International Bureau of Education; Brussels, Belgium: International Academy of Education, 2000 (ED 440 066).
- Brophy, J.E. "Research Linking Teacher Behavior to Student Achievement: Potential Implications for Instruction of Chapter 1 Students." *Educational Psychologist* 23/3 (Summer 1988b): 235-286 (ED 293 914).
- Brophy, J.E. "Synthesis of Research on Strategies for Motivating Students to Learn." *Educational Leadership* 45/2 (October 1987): 40-48.
- Brophy, J.E. "Teacher Behavior and Its Effects." *Journal of Educational Psychology* 71/6 (December 1979): 733-750 (ED 181 014).
- Brophy, J.E. "Teacher Influences on Student Achievement." *American Psychologist* 4/10 (October 1986b): 1069-1077.
- Brophy, J.E. *Teacher Praise: A Functional Analysis*. East Lansing, MI: The Institute for Research on Teaching, 1980 (ED 181 013).
- Brophy, J.E., and Good, T.L. "Teacher Behavior and Student Achievement." In *Handbook of Research on Teaching, Third Edition*, edited by M.C. Wittrock. New York, NY: Macmillan, 1986, 328-377.
- Broughton, S.F. *Effects and Noneffects of Reinforcement for Academic Performance*. Paper presented at the Meeting of the Midwestern Association of Behavior Analysis, Chicago, IL, May 1978 (ED 186 794).
- Brualdi, A.C. *Classroom Questions. ERIC/AE Digest*. Washington, DC: ERIC Clearinghouse on Assessment and Evaluation, February 1998 (ED 422 407).
- Brundage, D. (ed.). *The Journalism Research Fellows Report: What Makes an Effective School?* Washington, DC: George Washington University, 1979 (ED 226 506).
- Buechler, M. *District Support for Comprehensive School Reform*. Portland, OR: Northwest Regional Educational Laboratory, 2000. Unpublished manuscript.
- Burak, L.J. "Independent Activities Teach Skills for Lifelong Learning." *Journal of Health Education* 24/5 (October 1993): 376-378.
- Burden, P.R. *Powerful Classroom Management Strategies: Motivating Students to Learn*. Thousand Oaks: Corwin, 2000.
- Burns, R.B. "Mastery Learning. Does It Work?" *Educational Leadership* 37/2 (November 1979): 110-113.
- Butler, D.L. *The Roles of Goal Setting and Self-Monitoring in Students' Self-Regulated Engagement in Tasks*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, March 1997 (ED 409 323).
- Butler, J.A. "A Review of Adult Learning Theory and Staff Development Research." In *School Leader Development for School Improvement, International School*

- Improvement Project Technical Report #8*, edited by R.E. Blum and J.A. Butler. Leuven, Belgium: Acco, 1989 (ED 308 334).
- Butler, J.A. *Staff Development. Close-Up #12*. Portland, OR: Northwest Regional Educational Laboratory, 1992.
- Caissy, G. "Developing Curriculum for the Information Age: How Must Education Change to Meet Future Needs?" *Education Canada* 26/2 (Summer 1986): 21-25.
- Campbell, L., and Campbell, B. *Multiple Intelligences and Student Achievement: Success Stories from Six Schools*. Alexandria, VA: Association for Supervision and Curriculum Development, 1999 (ED 437 180).
- Cannella, G.S. "Praise and Concrete Rewards: Concerns for Childhood Education." *Childhood Education* 62/4 (March/April 1986): 297-301.
- Carr, D. "Living on One's Own Horizon: Cultural Institutions, School Libraries, and Lifelong Learning." *School Library Media Quarterly* 19/4 (Summer 1991): 217-222.
- Carr, D. "The Art of Asking Questions in the Teaching of Science." *School Science Review* 79/289 (June 1998): 47-60.
- Casey, L.; Casiello, C.; Gruca-Peal, B.; and Johnson, B. *Advancing Academic Achievement in the Heterogeneous Classroom*. Chicago, IL: Saint Xavier University and IRI/Skylight, June 1995 (ED 400 073).
- Cavalier, J.C., and Klein, J.D. "The Effects of Cooperative Versus Individual Learning and Orienting Activities During Computer-based Instruction." *Educational Technology Research and Development* 46/1 (1998): 5-17.
- Cawelti, G. "Improving Achievement." *American School Board Journal* 186/7 (July 1999): 34-37.
- Cawelti, G. *Effects of High School Restructuring: Ten Schools at Work. ERS Concerns in Education Series*. Arlington, VA: Educational Research Service, 1997 (ED 406 730).
- Cawelti, G. *How Effective Instructional Leaders Get Results*. Paper presented at the Annual Meeting of the American Association of School Administrators, New Orleans, LA, February 1987 (ED 328 935).
- Ceperley, P.A. *Implementation of Title I Schoolwide Programs in Four Rural Virginia Schools*. Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Quebec, Canada, April 1999 (ED 438 993).
- Chang, C., and Barufaldi, J.P. *Initiating Change in Students' Achievement and Alternative Frameworks through a Problem-Solving Based Instructional Model*. Paper presented at the Annual Meeting of the American Educational Research Association, Oak Brook, IL, March 1997 (ED 406172).
- Chang, C., and Mao, S. "Comparison of Taiwan Science Students' Outcomes with Inquiry-Group versus Traditional Instruction." *Journal of Educational Research* 92/6 (July-August 1999): 340-346.
- Chang, C., and Mao, S. *The Effects of an Inquiry-Based Instructional Method on Earth Science Students' Achievement. The Effects of an Inquiry-Based Instructional Method on Earth Science Students' Achievement*. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA, April 1998 (ED 418 858).
- Chang, K.; Lin, M; and Chen, S. "Application of the Socratic Dialogue on Corrective Learning of Subtraction." *Computers and Education* 31/1 (August 1998): 55-68.

- Chilcoat, G.W. "Instructional Behaviors for Clearer Presentations in the Classroom." *Instructional Science* 18/4 (December 1989): 289-314.
- Chin, C., and Brown, D.E. "Learning in Science: A Comparison of Deep and Surface Approaches." *Journal of Research in Science Teaching* 37/2 (February 2000):109-138.
- Ciardiello, A.V. "Teacher Questioning and Student Interaction: An Observation of Three Social Studies Classes." *Social Studies* 77/3 (May/June 1986): 119-122.
- Clark, H.C., and Nelson, M.N. "Improving Mathematics Evaluation through Cooperative Learning Strategies." *Middle School Journal* 24/3 (January 1993): 15-18.
- Cohen, P.A.; Kulik, J.A.; and Kulik, C.C. "Educational Outcomes of Tutoring: A Meta-Analysis of Findings." *American Educational Research Journal* 19/2 (Summer 1982): 237-248.
- Cohen, S.A. "Instructional Alignment." In *International Encyclopedia of Education: Research and Studies, Volume 5, Second Edition*, edited by T. Husen and T.N. Postlethwaite. London, England: Pergamon Press, 1994, 2852-2856.
- Cohen, S.A.; Hyman, J.S.; Ashcroft, L.; and Loveless, D. *Comparing Effects of Meta-cognition, Learning Styles, and Human Attributes with Alignment*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, 1989.
- Colvin, R. "Losing Faith in Self-Esteem." *The School Administrator* 57/2 (February 2000): 28-29, 31-33.
- Connell, N. *Beating the Odds: High-Achieving Elementary Schools in High-Poverty Neighborhoods*. New York, NY: Educational Priorities Panel, June 1999 (ED 441 913).
- Corbett, H.D., and Wilson, B.L. "The Central Office Role in Instructional Improvement." *School Effectiveness and School Improvement* 3/1 (January 1992): 45-68.
- Corbett, H.D.; Dawson, J.A.; and Firestone, W.A. *School Context and School Change: Implications for Effective Planning*. New York, NY: Teachers College Press, 1984.
- Corcoran, T.B. "Effective Secondary Schools." In *Reaching for Excellence: An Effective Schools Sourcebook*. Washington, DC: National Institute of Education, May 1985, 71-97.
- Corder, G.W. *The Practices, Attitudes, and Behaviors of Experienced Teachers That Motivate Middle Grades Students*. Harrisonburg, VA: Thomas Harrison Middle School (ED 442 785).
- Corno, L., and Snow, R.E. "Adapting Teaching to Individual Differences Among Learners." In *Handbook of Research on Teaching, Third Edition*, edited by M.C. Wittrock. New York, NY: Macmillan, 1986, 605-629.
- Costello, R.W., and Chapin, D.W. *Problem Solving within a Changing Indiana State Testing Program*. Noblesville, IN: Noblesville Public Schools, 2000 (ED 445 054).
- Cotton, K. *Classroom Questioning. Close-Up #5*. Portland, OR: Northwest Regional Educational Laboratory, 1989a (ED 312 030).
- Crawford, W.J.; King, C.E.; Brophy, J.E.; and Evertson, C.M. *Error Rates and Question Difficulty Related to Elementary Children's Learning*. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, DC, April 1975 (ED 147 275).

- Crone, L.J., and Teddlie, C. "Further Examination of Teacher Behavior in Differentially Effective Schools: Selection and Socialization Process." *Journal of Classroom Interaction* 30/1 (1995): 1-9.
- Crump, W.D.; Schlichter, C.L.; and Palk, B.E. "Teaching HOTS in the Middle and High School: A District-Level Initiative in Developing Higher Order Thinking Skills." *Roeper Review* 10/4 (May 1988): 205-211.
- daCosta, J.L. *Teacher Collaboration: The Role of Trust and Respect*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 1995 (ED 384 607).
- Dalton, D.W., and Hannafin, M.J. "The Effects of Computer-Assisted and Traditional Mastery Methods on Computation Accuracy and Attitudes." *Journal of Educational Research* 82/1 (September/October 1988): 27-33.
- Darter, C.L., Jr., and Phelps, L.N. *The Impact of the Computer on the Teaching of Reading: A Review of the Literature*. Wichita Falls, TX: Midwestern State University, 1990 (ED 326 836).
- Davalos, R.A., and Haensly, P.A. "After the Dust Has Settled: Youth Reflect on Their High School Mentored Research Experience." *Roeper Review* 19/4 (July 1997): 204-207.
- David, J.L. "Synthesis of Research on School-Based Management." *Educational Leadership* 46/8 (May 1989): 45-53.
- Deal, T.E., and Peterson, K.D. *The Principal's Role in Change: Technical and Symbolic Aspects of School Improvement*. Madison, WI: University of Wisconsin-Madison, Wisconsin Center for Education Research, National Center for Effective Schools, 1993.
- DeBevoise, W. "Synthesis of Research on the Principal as Instructional Leader." *Educational Leadership* 41/5 (February 1984): 14-20.
- Dewalt, M.W., and Rodwell, F.G. "Effects of Increased Learning Time in Remedial Math and Science." *Spectrum* 6/1 (Winter 1988): 33-36.
- Dickinson, L. "Autonomy and Motivation: A Literature Review." *System* 23/2 (May 1995): 165-174.
- Dillashaw, F.G., and Okey, J.R. "Effects of a Modified Mastery Learning Strategy on Achievement, Attitudes, and On-Task Behavior of High School Chemistry Students." *Journal of Research in Science Teaching* 20/3 (March 1983): 203-211.
- DiPardo, A., and Freedman, S.W. "Peer Response Groups in the Writing Classroom: Theoretic Foundations and New Directions." *Review of Educational Research* 58/2 (Summer 1988): 119-149.
- Druian, G., and Butler, J.A. *Effective Schooling Practices and At-Risk Youth: What the Research Shows. Topical Synthesis #1*. Portland, OR: Northwest Regional Educational Laboratory, 1987 (ED 291 146).
- Duke, R.A., and Henniger, J.C. "Effects of Verbal Corrections on Student Attitude and Performance." *Journal of Research in Music Education* 46/4 (Winter 1998): 482-495.
- Dunn, R. "Learning Style: State of the Science." *Theory Into Practice* 23/1 (Winter 1984): 10-19.
- Eberts, R.W., and Stone, J.A. "Student Achievement in Public Schools: Do Principals Make a Difference?" *Economics of Education Review* 7/3 (1988): 291-299.

- Edmonds, R.R. "Effective Schools for the Urban Poor." *Educational Leadership* 37/1 (October 1979a): 15-24.
- Edmonds, R.R. "Some Schools Work and More Can." *Social Policy* 9 (1979b): 28-32.
- Education Commission of the States. *A Framework for Urban Hope: The New American Urban School District*. Denver, CO: Education Commission of the States, January 1995 (ED 384 683).
- Education Trust. *Dispelling the Myth: High Poverty Schools Exceeding Expectations*. Washington, DC: Education Trust, 1999.
- Eilers, J.L.; Fox, J.L.; Welvaert, M.S.; and Wood, J.M. *Increasing Teacher, Parent, and Student Involvement To Promote Student Learning and Self-Esteem*. Chicago, IL: St. Xavier University and IRI/Skylight, 1998 (ED 422 095).
- Ellis, E.S., and Worthington, L.A. *Research Synthesis on Effective Teaching Principles and Design of Quality Tools for Educators. Technical Report No. 5*. Eugene, OR: National Center to Improve the Tools of Educators, University of Oregon, January 1994 (ED 386 853).
- Ellis, K. *Teacher Questioning Behavior and Student Learning: What Research Says to Teachers*. Paper presented at the Annual Meeting of the Western States Communication Association, Albuquerque, NM, February 1993 (ED 359 572).
- Emrick, J.A. *Evaluation of the National Diffusion Network (Volume I: Findings and Recommendations)*. Stanford, CA: Stanford Research Institute, 1977.
- Eubanks, E.E., and Levine, D.U. "A First Look at Effective Schools Projects in New York City and Milwaukee." *Phi Delta Kappan* 64/10 (June 1983): 697-702.
- Everson, S.T.; Scollay, S.J.; Fabert, B.; and Garcia, M. "An Effective Schools Program and its Results: Initial District, School, Teacher, and Student Outcomes in a Participating District." *Journal of Research and Development in Education* 19/3 (Spring 1986): 35-50.
- Evertson, C.M. "Do Teachers Make a Difference?" *Education and Urban Society* 18/2 (February 1986): 195-210.
- Evertson, C.M. "Improving Elementary Classroom Management: A School-Based Training Program for Beginning the Year." *Journal of Educational Research* 83/2 (November/December 1989): 82-90.
- Evertson, C.M. *Classroom Organization and Management Program. Revalidation Submission to the Program Effectiveness Panel, U.S. Department of Education*. Nashville, TN: Vanderbilt University, 1995 (ED 403 247).
- Ferguson, J.M., and Nochelski, P. "The Power of Letting Go." *American School Board Journal* 183/4 (April 1996): 37-39.
- Fields, J.I. "Empirical Data Research into the Claims for Using Philosophy Techniques with Young Children." *Early Child Development and Care* 107 (March 1995): 115-128.
- Fluellen, J.E., Jr. *Kids Teaching Kids: An Ethnographic Study of Children's Strategies for Presenting in a 5th Grade Science Class. Occasional Paper #1*. Philadelphia, PA: Smile of Africa, Inc. (ED 432 475).
- Fortune, J.C.; Williams, J.; and White, W. *Help Instructional Growth to Happen. Final Evaluation Report, Chapter 2 Competitive Grant Program*. Palmyra, VA: Fluvanna County Public Schools, 1992 (ED 344 313).

- Fouts, J.T. *School Restructuring and Student Achievement in Washington State: Research Findings on the Effects of House Bill 1209 and School Restructuring on Western Washington Schools*. Seattle, WA: Seattle Pacific University, 1999 (ED 432 044).
- Fraenkel, J.R. *Characteristics and Behaviors of Effective Social Studies Teachers in Selected Countries*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 1995 (ED 388 543).
- Fuchs, D.; Fuchs, L.S.; Mathes, P.G.; and Simmons, D.C. *Peer-Assisted Learning Strategies: Making Classrooms More Responsive to Diversity*. Nashville, TN: Vanderbilt University, 1996 (ED 393 269).
- Fuchs, L.S.; Fuchs, D.; and Kazdan, S. "Effects of Peer-Assisted Learning Strategies on High School Students with Serious Reading Problems." *Remedial and Special Education* 20/5 (September/October 1999): 309-318.
- Fullan, M. "Coordinating School and District Development in Restructuring." In *Restructuring Schooling: Learning from Ongoing Efforts*, edited by J. Murphy and P. Hallinger. Newbury Park, CA: Corwin Press, 1993, 143-164.
- Fullan, M. "Overcoming Barriers to Educational Change." In *Changing Schools: Insights*. Washington, DC: Office of Policy and Planning, U.S. Department of Education, 1992, 11-20.
- Gage, N. "What Do We Know about Teaching Effectiveness?" *Phi Delta Kappan* 66/2 (October 1984): 87-93.
- Gall, M.D. "Synthesis of Research on Teachers' Questioning." *Educational Leadership* 42/3 (November 1984): 40-47.
- Gall, M.D., and Renschler, R.S. *Effective Staff Development for Teachers: A Research-Based Model*. Eugene, OR: ERIC Clearinghouse on Educational Management, 1985 (ED 256 009).
- Gall, M.D.; Fielding, G.; Shalock, D.; Charters, W.W., Jr.; and Wilczynski, J. *Involving the Principal in Teachers' Staff Development: Effects on the Quality of Mathematics Instruction in Elementary Schools*. Eugene, OR: Center for Educational Policy and Management, University of Oregon, 1984 (ED 251 929).
- Gall, M.D.; Gall, J.P.; Jacobsen, D.R.; and Bullock, T.L. *Tools for Learning: A Guide to Teaching Study Skills*. Alexandria, VA: Association for Supervision and Curriculum Development, 1990 (ED 320 126).
- Gardner, H.A. *The Role of Error Correction in Working with Emergent Readers*. San Rafael, CA: Dominican College, 1998 (ED 430 207).
- Gaziel, H. "Managerial Work Patterns of Principals at High- and Average-Performing Israeli Elementary Schools." *The Elementary School Journal* 96/2 (1995): 179-194.
- Geiser, W.F. "Effects of Learning-Style-Responsive Versus Traditional Study Strategies on Achievement, Study, and Attitudes of Suburban Eighth-Grade Mathematics Students." *Research in Middle Level Education Quarterly* 22/3 (Spring 1999): 19-41.
- George, C.A.; Grissom, J.B.; and Just, A.E. "Stories of Mixed Success: Program Improvement Implementation in Chapter 1 Schools." *Journal of Education for Students Placed at Risk* 1/1 (1996): 77-93.
- Gersten, R., and Carnine, D. "Direct Instruction in Reading Comprehension." *Educational Leadership* 43/7 (April 1986): 70-78.

- Gersten, R.; Becker, W.D.; Heiry, T.J.; and White, W.A.T. "Entry IQ and Yearly Academic Growth of Children in Direct Instruction Programs: A Longitudinal Study of Low SES Children." *Educational Evaluation and Policy Analysis* 6/2 (Summer 1984): 109-121.
- Gersten, R.; Carnine, D.; and Zoref, L. "A Multifaceted Study of Change in Seven Inner-City Schools." *The Elementary School Journal* 86/3 (January 1986): 257-276.
- Gettinger, M. "Student Behaviors, Teacher Reinforcement, Student Ability, and Learning." *Contemporary Educational Psychology* 8/4 (October 1983): 391-402.
- Gillingham, M.G., and Guthrie, J.T. "Relationships between CBI and Research on Teaching." *Contemporary Educational Psychology* 12/2 (April 1987): 189-199.
- Glasman, N.S. "Student Achievement and the School Principal." *Educational Evaluation and Policy Analysis* 7/2 (1984): 283-296.
- Gleason, M.; Carnine, D.; and Boriero, D. "Improving CAI Effectiveness with Attention to Instructional Design in Teaching Story Problems to Mildly Handicapped Students." *Journal of Special Education Technology* 10/3 (Spring 1990): 129-136.
- Good, T.L. "Teacher Effects." In *Making Our Schools More Effective: Proceedings of Three State Conferences*. Columbia, MO: University of Missouri, 1984.
- Good, T.L., and Brophy, J.E. "School Effects." In *Handbook of Research on Teaching, Third Edition*, edited by M.C. Wittrock. New York, NY: Macmillan, 1986, 570-602.
- Good, T.L., and Grouws, D.A. "Teaching and Mathematics Learning." *Educational Leadership* 37/1 (October 1979b): 39-45.
- Good, T.L., and Grouws, D.A. "Teaching Effects: A Process-Product Study in Fourth-Grade Mathematics Classrooms." *Journal of Teacher Education* 28/3 (May/June 1977): 49-54.
- Good, T.L., and Grouws, D.A. "The Missouri Mathematics Effectiveness Project: An Experimental Study in Fourth-Grade Classrooms." *Journal of Educational Psychology* 71/3 (June 1979a): 355-362.
- Goodwin, B. *Raising the Achievement of Low-Performing Schools*. Policy Brief. Aurora, CO: Mid-Continent Research for Education and Learning, May 2000 (ED 442 807).
- Gorrell, J., and Keel, L. "A Field Study of Helping Relationships in a Cross-age Tutoring Program." *Elementary School Guidance and Counseling* 20/4 (April 1986): 268-276.
- Gottfried, A.E., and Gottfried, A.W. *Parents' Reward Strategies and Children's Academic Intrinsic Motivation and School Performance*. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA, April 1991 (ED 335 144).
- Gray, D.L. "Improving Your School's Test Scores." *Principal* 78/3 (January 1999): 47-48.
- Greenwood, C.R.; Terry, B.; Marquis, J.; and Walker, D. "Confirming a Performance-Based Instructional Model." *School Psychology Review* 23/4 (1994): 652-668.
- Gullatt, D.E., and Lofton, B.D. *The Principal's Role in Promoting Academic Gain*. Natchitoches, LA: Northwestern State University of Louisiana; Alexandria, LA: Rapides Parish School Board, December 1996 (ED 403 227)
- Gurr, D. *Principal Leadership: What Does it Do, What Does it Look Like?* Melbourne, Australia: Department of Education Policy and Management, University of Melbourne, 1997. Available: <http://www.apcentre.edu.au/respapers/gurrd.html>

- Guskey, T.R., and Gates, S.L. "Synthesis of Research on the Effects of Mastery Learning in Elementary and Secondary Classrooms." *Educational Leadership* 43/8 (May 1986): 73-80.
- Haller, E.P.; Child, D.A.; and Walberg, H.J. "Can Comprehension Be Taught? A Quantitative Synthesis of 'Metacognitive' Studies." *Educational Researcher* 17/9 (December 1988): 5-8.
- Hallinger, P., and Hausman, C. "The Changing Role of the Principal in a School of Choice." In *Restructuring Schooling: Learning from Ongoing Efforts*, edited by J. Murphy and P. Hallinger. Newbury Park, CA: Corwin Press, 1993, 114-142.
- Hallinger, P., and Heck, R.H. "Reassessing the Principal's Role in School Effectiveness." *Educational Administration Quarterly* 32/1 (February 1996); 5-44.
- Hallinger, P.; Bickman, L.; and Davis, K. *What Makes a Difference? School Context, Principal Leadership, and Student Achievement*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, March 1989 (ED 332 341; ED 308 578).
- Hancock, V.E. *Information Literacy for Lifelong Learning*. ERIC Digest. Syracuse, NY: ERIC Clearinghouse on Information Resources, May 1993 (ED 358 870).
- Hano, A.R. "Immediate Corrective Feedback and Classroom Performance." In L.P. McCoy (ed.). *Studies in Teaching 1999 Research Digest*. Research Projects Presented at Annual Research Forum, Winston-Salem, NC, December 1999 (ED 443 814).
- Hansler, D.D. *Studies on the Effectiveness of the Cognition Enhancement Technique for Teaching Thinking Skills*. Washington, DC, 1985 (ED 266 432).
- Harwell, M.; D'Amico, L.; Stein, M.K.; and Gatti, G. *The Effects of Teachers' Professional Development on Student Achievement in Community School District #2*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA, April 2000 (ED 455 055).
- Hawkins, J.D.; Doueck, H.J.; and Lishner, D.M. "Changing Teaching Practices in Mainstream Classrooms to Improve Bonding and Behavior of Low Achievers." *American Educational Research Journal* 25/1 (Spring 1988): 31-50.
- Hawley, W.D.; Rosenholtz, S.J.; Goodstein, H.; and Hasselbring, T. "Good Schools: What Research Says about Improving Student Achievement." *Peabody Journal of Education* 61/4 (Summer 1984): entire issue.
- Haycock, K. "What Works: Early Interventions in Student Research." *Emergency Librarian* 25/4 (March/April 1998): 29.
- Heck, R.H. "Principals' Instructional Leadership and School Performance: Implications for Policy Development." *Educational Evaluation and Policy Analysis* 14/1 (Spring 1992): 21-34.
- Heistad, D. *Teachers Who Beat the Odds: Value-Added Reading Instruction in Minneapolis 2nd Grade Classrooms*. Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Quebec, Canada, April 1999. (ED 438 501).
- Herrnstein, R.J.; Nickerson, R.S.; de Sanchez, M.; and Swets, J.A. "Teaching Thinking Skills." *American Psychologist* 41/11 (November 1986): 1279-1289.
- Hess, G.A., Jr. "Understanding Achievement (and Other) Changes Under Chicago School Reform." *Educational Evaluation and Policy Analysis* 21/1 (Spring 1999): 67-83.

- High, R.M., and Achilles, C.M. *Principal Influence in Instructionally Effective Schools*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 1986 (ED 277 115).
- Hoek, D.; van den Eeden, P.; and Terwel, J. *The Effects of Social and Cognitive Strategies Instruction on the Mathematics Achievement in Secondary Education*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, March 1997 (ED 406 213).
- Honea, J.M., Jr. "Wait-Time as an Instructional Variable: An Influence on Teacher and Student." *The Clearing House* 56/4 (December 1982): 167-170.
- Hopkins, M.S. *Effective School Practices: What Works*. Paper presented at the International Conference on Effective Schools, Houston, TX, October 1999 (ED 435 777).
- Hord, S.M. "Creating a Professional Learning Community: Cottonwood Creek School." *Issues about Change* 6/2 (1998): entire issue (ED 424 685).
- Hord, S.M. "Realizing School Improvement Through Understanding the Change Process." *Issues . . . about Change* 1/1 (Winter 1990): entire issue.
- Hord, S.M. "The New Alliance of Superintendents and Principals: Applying the Research to Site-Based Decision Making." *Issues . . . about Change* 2/1 (1992b): entire issue.
- Hord, S.M. *Facilitative Leadership: The Imperative for Change*. Austin, TX: Southwest Educational Development Laboratory, 1992a (ED 370 217).
- Hord, S.M. *Professional Learning Communities: Communities of Continuous Inquiry and Improvement*. Austin, TX: Southwest Educational Development Laboratory, 1997 (ED 410 659).
- Hord, S.M., and Huling-Austin, L. "Effective Curriculum Implementation: Some Promising New Insights." *The Elementary School Journal* 87/1 (September 1986): 97-115.
- Horton, J., and Ryba, K. "Assessing Learning with Logo: A Pilot Study." *The Computing Teacher* 14/1 (1986): 24-28.
- Hoxmeier, K.A. *Questioning Techniques for Teachers: Teaching Reading, Thinking, and Listening Skills*. Paper presented at the Annual Meeting of the North Central Reading Association, South Bend, IN, October 1986 (ED 284 186).
- Hoy, W.K.; Hannum, J.; and Tschannen-Moran, M. *Organizational Climate and Student Achievement: A Parsimonious and Longitudinal View*. *Journal of School Leadership* 8/4 (336- Journal of School Leadership, v8 n4 (July 1998): 336-359.
- Huber, R.A.; Smith, R.W.; and Shotsberger, P.G. *The Impact of a Standards Guided Equity and Problem Solving Institute on Participating Science Teachers and Their Students*. Wilmington, NC: University of North Carolina, 2000. (ED 442 621).
- Huberman, A.M., and Miles, M.B. *Innovation Up Close: How School Improvement Works*. New York, NY: Plenum Press, 1984a.
- Hudgins, B., and Edelman, S. "Teaching Critical Thinking Skills to Fourth and Fifth Graders Through Teacher-Led Small-Group Discussions." *Journal of Educational Research* 79/6 (July/August 1986): 333-342.
- Jackson, R.M., and Crawford, G.J. *The Superintendent and School Improvement: Antecedents, Actions and Outcomes*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, April 1991 (ED 333 538).

- Johnson, D.M.; Wardlow, G.W.; and Franklin, T.D. "Method of Reinforcement and Student Gender: Effects on Achievement in Agriscience Education." *Journal of Agricultural Education* 39/4 (1998): 18-27.
- Johnson, G.; Gersten, R.; and Carnine, D. "Effects of Instructional Design Variables on Vocabulary Acquisition of LD Students: A Study of Computer-Assisted Instruction." *Journal of Learning Disabilities* 20/4 (April 1987): 206-213.
- Johnson, J.F., and Asera, R. *Hope for Urban Education: A Study of Nine High-Performing, High-Poverty, Urban Elementary Schools*. Austin, TX: Charles A. Dana Center, University of Texas, 1999. Available: <http://www.ed.gov/pubs/urbanhope/title>
- Johnson, J.G. *Data-Driven School Improvement. ERIC Digest*. Eugene, OR: ERIC Clearinghouse on Educational Management, January 1997 (ED 401 595).
- Johnson, J.P.; Livingston, M.; Schwartz, R.A.; and Slate, J.R. "What Makes a Good Elementary School? A Critical Examination." *Journal of Educational Research* 93/6 (July/August 2000): 339-345.
- Johnston, J.D.; Markle, G.C.; and Haley-Oliphant, A. "What Research Says About Questioning in the Classroom." *Middle School Journal* 18/4 (August 1987): 29-33.
- Jones, R., and Fulton, M. "What Works." *American School Board Journal* 185/4 (April 1998): 28-33.
- Joyce, B. "Staff Development and Student Learning: A Synthesis of Research on Models of Teaching." *Educational Leadership* 45/2 (October 1987): 11-23.
- Joyce, B., and Showers, B. "Improving Inservice Training: The Messages of Research." *Educational Leadership* 37/5 (February 1980): 379-385.
- Joyce, B., and Showers, B. *Student Achievement Through Staff Development: Fundamentals of School Renewal* (2nd Ed.) White Plains, NY: Longman, 1995.
- Joyce, B.; Murphy, C.; Showers, B.; and Murphy, J. "School Renewal as Cultural Change." *Educational Leadership* 47/3 (November 1989): 70-77.
- Kagan, D.M. "Evaluating a Language Arts Program Designed to Teach Higher Level Thinking Skills." *Reading Improvement* 25/1 (Spring 1988): 29-33.
- Karp, K.S. "Elementary School Teachers' Attitudes Toward Mathematics: The Impact on Students' Autonomous Learning Skills." *School Science and Mathematics* 9/16 (October 1991): 265-270.
- Kastra, J.; Tollefson, N.; and Gilbert, E. "The Effects of Peer Evaluation on Attitude Toward Writing and Writing Fluency of Ninth Grade Students." *Journal of Educational Research* 80/3 (January/February 1987): 168-172.
- Katz, L. "The Disposition to Learn." *Principal* 67/5 (May 1988): 14-17.
- Kearns, J. *The Impact of Systematic Feedback on Student Self-Esteem*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA, April 1988 (ED 293 897).
- Kentucky State Department of Education. *Results Matter: A Decade of Difference in Kentucky's Public Schools, 1990-2000*. Frankfort, KY: Kentucky State Department of Education, 2000 (ED 440 790).
- Kinzie, M.B.; Sullivan, H.J.; and Berdel, R.L. "Learner Control and Achievement in Science Computer-Assisted Instruction." *Journal of Educational Psychology* 80/3 (September 1988): 299-303.

- Klein, S.; Hamilton, L.; McCaffrey, D.; Stecher, B.; Robyn, A.; and Burroughs, D. *Teaching Practices and Student Achievement: Report of First-Year Findings from the 'Mosaic' Study of Systemic Initiatives in Mathematics and Science*. Santa Monica, CA: Rand, 2000 (ED 445 914).
- Knowles, M.S. "Fostering Competence in Self-Directed Learning." In *Learning to Learn Across the Life Span*, edited by R.M. Smith. San Francisco: Jossey-Bass, 1990, 123-136.
- Kohler, F.; Crilley, K.M.; and Shearer, D.D. "Effects of Peer Coaching on Teacher and Student Outcomes." *Journal of Educational Research* 90/4 (March/April 1997): 240-250.
- Kohn, A. *The Risks of Rewards*. ERIC Digest. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education, December 1994 (ED 376 990).
- Kooy, T. "The Effect of Graphic Advance Organizers on the Math and Science Comprehension of High School Special Education Students." *BC Journal of Special Education* 16/2 (1992): 101-111.
- Kopacsi, R., and Hochwald, E. *Restructuring Kindergarten in an Urban School District: The Case of Newark, New Jersey*. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA, April 1998 (ED 422 104).
- Korinek, L.; Schmid, R.; and McAdams, M. "Inservice Types and Best Practices." *Journal of Research and Development in Education* 18/2 (Winter 1985): 33-38.
- Koufetta-Menicou, C., and Scaife, J. "Teachers' Questions—Types and Significance in Science Education." *School Science Review* 81/296 (March 2000): 79-84.
- Krug, S.E. *Instructional Leadership, School Instructional Climate, and Student Learning Outcomes*. Project Report. Champaign, IL: MetriTech; Urbana, IL: National Center for School Leadership, 1992 (ED 359 668).
- Kulik, J.A., and Kulik, C.C. "Timing of Feedback and Verbal Learning." *Review of Educational Research* 58/1 (Spring 1988): 79-97.
- Kulik, J.A., and Kulik, C.C. *Computer-Based Instruction: What 200 Evaluations Say*. Paper presented at the Annual Convention of the Association for Educational Communications and Technology, Atlanta, GA, February/March 1987 (ED 285 521).
- Kushman, J.W. (ed.). *Look Who's Talking Now: Student Views of Learning in Restructuring Schools*. Portland, OR: Northwest Regional Educational Laboratory, February 1997 (ED 404 752).
- Lalley, J.P. "Comparison of Text and Video as Forms of Feedback During Computer Assisted Learning." *Journal of Educational Computing Research* 18/4 (1998): 323-338.
- Langer, J.A. *Excellence in English in Middle and High School: How Teachers' Professional Lives Support Student Achievement*. Albany, NY: National Research Center on English Learning and Achievement, 1999 (ED 429 295).
- LaRocque, L., and Coleman, P. "Quality Control": *School Accountability and District Ethos*. Burnaby, BC: Simon Fraser University; Ottawa, ON: Social Sciences and Humanities Research Council of Canada, 1988 (ED 315 420).
- Larsen, R.J. *Identification of Instructional Leadership Behaviors and the Impact of Their Implementation on Academic Achievement*. Paper presented at the Annual Meeting of the

- American Educational Research Association, Washington, DC, April 1987 (ED 281 286).
- Lee, V.E., and Smith, J.B. "Collective Responsibility for Learning and Its Effects on Gains in Achievement for Early Secondary School Students." *American Journal of Education* 104/2 (February 1996): 103-147.
- Lee, V.E., and Smith, J.B. "Effects of High School Restructuring and Size on Early Gains in Achievement and Engagement." *Sociology of Education* 68/4 (October 1995): 241-270.
- Lee, V.E., and Smith, J.B. "Effects of School Restructuring on the Achievement and Engagement of Middle-Grade Students." *Sociology of Education* 66/3 (July 1993): 164-187.
- Leithwood, K. "Leadership for School Restructuring." *Educational Administration Quarterly* 30/4 (November 1994): 498-518.
- Leithwood, K., and Jantzi, D. "Transformational School Leadership Effects: A Replication." *School Effectiveness and School Improvement* 10/4 (December 1999): 451-479.
- Leithwood, K.A., and Montgomery, D.J. "The Role of the Elementary School Principal in Program Improvement." *Review of Educational Research* 52/3 (Fall 1982): 309-339.
- Leithwood, K.A., and Montgomery, D.J. "The Role of the Principal in School Improvement." In *Research on Exemplary Schools*, edited by G.R. Austin and H. Garber. Orlando, FL: Academic Press, 1985, 155-177.
- Levine, D. "Successful Approaches for Improving Academic Achievement in Inner-City Elementary Schools." *Phi Delta Kappan* 63/8 (April 1982): 523-526.
- Levine, D.U. "Update on Effective Schools: Findings and Implications from Research and Practice." *Journal of Negro Education* 59/4 (Fall 1990): 577-584.
- Levine, D.U., and Lezotte, L.W. *Unusually Effective Schools: A Review and Analysis of Research and Practice*. Madison, WI: The National Center for Effective Schools Research and Development, 1990 (ED 330 032).
- Levine, D.U., and Ornstein, A.C. "Reforms That Can Work." *American School Board Journal* 180/6 (June 1993): 31-34.
- Levine, D.U., and Stark, J. "Instructional and Organizational Arrangements That Improve Achievement in Inner City Schools." *Educational Leadership* 40/3 (December 1982): 41-46.
- Levine, D.U.; Levine, R.F.; and Eubanks, E.E. "Successful Implementation of Instruction at Inner-City Schools." In *Effective School Leadership: Policy and Process*, edited by J. J. Lane and H. J. Walberg. Berkeley, CA: McCutchan, 1987.
- Lewis, A. *Restructuring America's Schools*. Arlington, VA: American Association of School Administrators, 1989.
- Lewis, S.; Williams, A.; and Casserly, M. *Critical Trends in Urban Education: A Poll of America's Great City Schools*. Washington, DC: Council of the Great City Schools, March 1998 (ED 418 185).
- Lindmark, T.; Marshall, J.; Riley, S.; and Strey, E. *Improving Behavior and Academic Success through a Caring Classroom. Master's Action Research Project*. Chicago, IL: Saint Xavier University, April 1996 (ED 399 493).
- Little, J.W. "Norms of Collegiality and Experimentation: Workplace Conditions and School Success." *American Educational Research Journal* 19/3 (Fall 1982): 325-340.

- Little, J.W. "Seductive Images and Organizational Realities in Professional Development." In *Rethinking School Improvement/Research, Craft, and Concept*, edited by A. Lieberman. New York, NY: Teachers College Press, 1986, 26-44.
- Loucks-Horsley, S.; Harding, C.K.; Arbuckle, M.A.; Murray, L.B.; Dubea, C.; and Williams, M.K. *Continuing to Learn: A Guidebook for Teacher Development*. Andover, MA: The Regional Laboratory for the Educational Improvement of the Northeast and Islands; Oxford, OH: National Staff Development Council, 1987 (ED 285 837).
- Louis, K.S., and King, J.A. "Professional Cultures and Performing Schools: Does the Myth of Sisyphus Apply?" In *Restructuring Schooling: Learning from Ongoing Efforts*, edited by J. Murphy and P. Hallinger. Newbury Park, CA: Corwin Press, 1993, 216-250.
- Louis, K.S., and Miles, M.B. *Improving the Urban High School: What Works and Why*. New York, NY: Teachers College Press, 1990 (ED 327 623).
- Louis, K.S.; Marks, H.M.; and Kruse, S.D. "Teachers' Professional Community in Restructuring Schools." *American Educational Research Journal* 33/4 (Winter 1996): 757-798.
- Lucangeli, D.; Galderisi, D.; and Cornoldi, C. "Specific and General Transfer Effects Following Metamemory Training." *Learning Disabilities Research and Practice* 10/1 (Winter 1995): 11-21.
- Lumpkins, B.; Parker, F.; and Hall, H. "Instructional Equity for Low Achievers in Elementary School Mathematics." *Journal of Educational Research* 84/3 (January/February 1991): 135-139.
- Lysakowski, R.S., and Walberg, H.J. "Classroom Reinforcement and Learning: A Quantitative Synthesis." *Journal of Educational Research* 75/2 (November/ December 1981): 69-77.
- Madden, J.V.; Lawson, D.R.; and Sweet, D. *School Effectiveness Study*. Sacramento, CA: State of California Department of Education, 1976.
- Madden, N.A.; Slavin, R.E.; Karweit, N.L.; Dolan, L.J.; and Wasik, B.A. "Success for All: Longitudinal Effects of a Restructuring Program for Inner-City Elementary Schools." *American Educational Research Journal* 30/1 (Spring 1993): 123-148.
- Makin, L. "Is the Salad Sandwich Blue?: Teacher Questions and Children's Learning." *Australian Journal of Early Childhood* 21/4 (November 1996): 1-5.
- Manley, R. "Coalescing a School Community around Total Quality: A Superintendent's Perspective." *School Administrator* 53/7 (August 1996): 29-32.
- Mansfield, J.B. "The Effect of Wait-Time on Issues of Gender Equity, Academic Achievement, and Attitude toward a Course." *Teacher Education and Practice* 12/1 (Spring/Summer 1996): 86-93.
- Maqsud, M. "Effects of Metacognitive Instruction on Mathematics Achievement and Attitude towards Mathematics of Low Mathematics Achievers." *Educational Research* 40/2 (Summer 1998): 237-243.
- March, J.K.; Peters, K.H.; Schwartz, M.; and Crisci, P.E. *The Long-Term Impact of a Staff Development Program on Student Performance in an Urban Setting*. Paper presented at the Annual Meeting of the American Educational Research Association, Atlanta, GA, April 1993 (ED 361 434).

- Marchant, G.J. *Intrinsic Motivation, Self-Perception, and Their Effects on Black Urban Elementary Students*. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA, April 1990 (ED 319 864).
- Matthews, D.B. "The Effect of a Thinking-Skills Program on the Cognitive Abilities of Middle School Students." *Clearing House* 62/5 (January 1989): 202-204.
- McCarthy, J., and Still, S. "Hollibrook Accelerated Elementary School." In *Restructuring Schooling: Learning from Ongoing Efforts*, edited by J. Murphy and P. Hallinger. Newbury Park, CA: Corwin Press, 1993, 63-83.
- McCarthy, M.T.; Webb, J.M.; and Hancock, T.E. "Form of Feedback Effects on Verb Learning and Near-Transfer Tasks by Sixth Graders." *Contemporary Educational Psychology* 20/2 (April 1995): 140-150.
- McGinley, W.J., and Denner, P.R. *The Use of Semantic Impressions as a Previewing Activity for Providing Clues to a Story's Episodic Structure*. Paper presented at the Annual Meeting of the Northern Rocky Mountain Educational Research Association, Jackson, WY, October 1985 (ED 266 425).
- McPartland, J.; Balfanz, R.; Jordan, W.; and Legters, N. "Improving Climate and Achievement in a Troubled Urban High School through the Talent Development." *Journal of Education for Students Placed at Risk (JESPAR)* 3/4 (1998): 337-361.
- Medley, D.M. "The Effectiveness of Teachers." In *Research on Teaching: Concepts, Findings and Interpretations*, edited by P.L. Peterson and H. Walberg. Berkeley, CA: McCutchan, 1979, 11-27.
- Metcalf, K.K., and Cruickshank, D.R. "Can Teachers Be Trained to Make Clear Presentations?" *Journal of Educational Research* 85/2 (November/December 1991): 107-116.
- Mevarech, Z.R., and Rich, Y. "Effects of Computer-Assisted Mathematics Instruction on Disadvantaged Pupils' Cognitive and Affective Development." *Journal of Educational Research* 79/1 (September/October 1985): 5-11.
- Mid-continent Regional Educational Laboratory. *Report of Thinking Skill Instructional Activities*. Denver, CO: Mid-Continent Regional Educational Laboratory, August 1985 (ED 273 970).
- Miller, R.; Smey-Richman, B.; and Woods-Houston, M. *Secondary Schools and the Central Office: Partners for Improvement*. Philadelphia, PA: Research for Better Schools, June 1987 (ED 290 213).
- Mitchell, F. *Bridging the Communication Gap between Teacher and Student: Composing Assignments in the Content Areas*. Paper presented at the Annual Meeting of the National Council of Teachers of English, Los Angeles, CA, November 1987 (ED 289 178).
- Molina, V., et al. *Improving Student Listening Skills through the Use of Teaching Strategies*. Chicago, IL: St. Xavier University, 1997 (ED 409 537).
- Mortimore, P.; Sammons, P.; Stoll, L.; Lewis, D.; and Ecob, R. *School Matters*. Berkeley, CA: University of California Press, 1988.
- Mortweet, S.L.; Utley, C.A.; Walker, D.; Dawson, H.L.; Delquadri, J.C.; Reddy, S.S.; Greenwood, C.R.; Hamilton, S.; and Ledford, D. "Classwide Peer Tutoring: Teaching Students with Mild Mental Retardation in Inclusive Classrooms." *Exceptional Children* 65/4 (Summer 1999): 524-536.

- Murphy, J., and Hallinger, P. (eds.). *Restructuring Schooling: Learning from Ongoing Efforts*. Newbury Park, CA: Corwin Press, 1993.
- Murphy, J.; Hallinger, P.; Peterson, K.D.; and Lotto, L.S. "The Administrative Control of Principals in Effective School Districts." *The Journal of Educational Administration* 25/2 (Summer 1987): 161-192.
- Naffziger, S.C.; Steele, M.M.; and Varner, B.O. *Academic Growth: Strategies to Improve Student Engagement in Their Learning*. Chicago, IL: Saint Xavier University and IRI/Skylight, May 1998 (ED 423 038).
- Newmann, F.M., and Wehlage, G.G. *Successful School Restructuring*. Madison, WI: Center on Organization and Restructuring of Schools, 1995.
- Newmann, F.M.; King, M.B.; and Rigdon, M. "Accountability and School Performance: Implications from Restructuring Schools." *Harvard Educational Review* 67/1 (Spring 1997): 41-74.
- Nickerson, R.S. "On Improving Thinking Through Instruction." In *Review of Research in Education*, 15, edited by E.Z. Rothkopf. Washington, DC: American Educational Research Association, 1988, 3-57.
- Norris, S.P. "Synthesis of Research on Critical Thinking." *Educational Leadership* 42/8 (May 1985): 40-45.
- Oakes, J. "What Educational Indicators? The Case for Assessing the School Context." *Educational Evaluation and Policy Analysis* 11/2 (Summer 1989): 181-199.
- Obach, M.S., and Moely, B.E. *Does Metacognition about Study Activities Predict Motivational Orientation in School-Aged Children?* Paper presented at the Annual Meeting of the American Educational Research Association, Atlanta, GA, April 1993 (ED 361 313).
- Ogawa, R.T., and Hart, A.W. "The Effect of Principals on the Instructional Performance of Schools." *The Journal of Educational Administration* 23/1 (Winter 1985): 59-72.
- Okey, J.R. *The Effectiveness of Computer-Based Education: A Review*. Paper presented at the Annual Meeting of the National Association for Research in Science Teaching, French Lick Springs, IN, April 1985 (ED 257 677).
- Osman, M.E., and Hannafin, M.J. "Effects of Advance Questioning and Prior Knowledge on Science Learning." *Journal of Educational Research* 88/1 (September/October 1994): 5-13.
- Page, E.B. "Is the World an Orderly Place? A Review of Teacher Comments and Student Achievement." *Journal of Experimental Education* 60/2 (1992): 161-181.
- Pajak, E., and Glickman, C.D. *Dimensions of Improving School Districts*. Athens, GA: University of Georgia, 1987 (ED 281 313).
- Paradise, L.V., and Block, C. "The Relationship of Teacher-Student Cognitive Style to Academic Achievement." *Journal of Research and Development in Education* 17/4 (Summer 1984): 57-61.
- Paris, S.G.; Oka, E.R.; and DeBritto, A.M. "Beyond Decoding: Synthesis of Research on Reading Comprehension." *Educational Leadership* 41/2 (October 1983): 78-83.
- Paterson, C.C. "Self-Regulated Learning and Academic Achievement of Senior Biology Students." *Australian Science Teachers Journal* 42/2 (June 1996): 48-52.
- Pavan, B.N., and Reid, N.A. "Effective Urban Elementary Schools and Their Women Administrators." *Urban Education* 28/4 (January 1994): 425-438.

- Pavan, B.N., and Reid, N.A. *Espoused Theoretical Frameworks and the Leadership Behaviors of Principals in Achieving Urban Elementary Schools*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, April 1991 (ED 337 533).
- Pearson, P.D. *A Context for Instructional Research on Reading Comprehension*. Champaign, IL: University of Illinois at Urbana-Champaign; Cambridge, MA: Bolt, Beranek, and Newman, 1982 (ED 215 307).
- Petersen, G.J. "Looking at the Big Picture: School Administrators and Violence Reduction." *Journal of School Leadership* 7/5 (September 1997): 456-479.
- Peterson, A.M. "Aspects of School Climate: A Review of the Literature." *ERS Spectrum* 15/1 (Winter 1997): 36-42.
- Peterson, K.D.; Gok, K.; and Warren, V.D. *Principals' Skills and Knowledge for Shared Decision Making*. Madison, WI: Center on Organization and Restructuring of Schools, University of Wisconsin-Madison, August 1995 (ED 386 827).
- Peterson, K.D.; Murphy, J.; and Hallinger, P. "Superintendents' Perception of the Control and Coordination of the Technical Core in Effective School Districts." *Educational Administration Quarterly* 23/1 (February 1987): 79-95.
- Pierce, A.F. *Improving the Strategies High School Students Use To Conduct Research on the Internet by Teaching*. Ft. Lauderdale, FL: Nova University, May 1998 (ED 427 756).
- Pintrich, P.R., and DeGroot, E.V. "Motivational and Self-Regulated Learning Components of Classroom Academic Performance." *Journal of Educational Psychology* 82/1 (March 1990): 33-40.
- Pogrow, S. "HOTS: A Thinking Skills Program for At-Risk Students." *Principal* 67/4 (March 1988): 19-24.
- Porter, A.C., and Brophy, J. "Synthesis of Research on Good Teaching: Insights from the Work of the Institute for Research on Teaching." *Educational Leadership* 45/8 (May 1988): 74-85.
- Pressley, M., et al. *A Survey of the Instructional Practices of Grade 5 Teachers Nominated as Effective in Promoting Literacy. Reading Research Report No. 85*. Athens, GA: National Reading Research Center, 1997. (ED 405 558).
- Prestine, N.A. "Feeding the Ripples, Riding the Waves." In *Restructuring Schooling: Learning from Ongoing Efforts*, edited by J. Murphy and P. Hallinger. Newbury Park, CA: Corwin Press, 1993, 32-62.
- Prestine, N.A., and Bowen, C. "Benchmarks of Change: Assessing Essential School Restructuring Efforts." *Educational Evaluation and Policy Analysis* 15/3 (Fall 1993): 298-319.
- Purkey, S.C., and Smith, M.S. "Effective Schools—A Review." *Elementary School Journal* 83/4 (March 1983): 427-452 (ED 221 534).
- Redfield, D.L., and Rousseau, E.W. "A Meta-analysis of Experimental Research on Teacher Questioning Behavior." *Review of Educational Research* 51/2 (Summer 1981): 237-245.
- Reed, C.J. *Student Leadership and Restructuring: A Case Study*. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA, April 1998 (ED 424 638).

- Reis, S.M.; Gentry, M.; and Park, S. *Extending the Pedagogy of Gifted Education to All Students. Research Monograph 95118*. Storrs, CT: National Research Center on the Gifted and Talented, 1995 (ED 427 495).
- Riding, R.J., and Powell, S.D. "The Effect on Reasoning, Reading and Number Performance of Computer-Presented Critical Thinking Activities in Five-year-old Children." *Educational Psychology* 7/1 (1987): 55-65.
- Riding, R.J., and Powell, S.D. "The Improvement of Thinking Skills in Young Children Using Computer Activities: A Replication and Extension." *Educational Psychology* 6/2 (1986): 179-183.
- Ridley, D.S.; McCombs, B.; and Taylor, K. "Waling the Talk: Fostering Self-Regulated Learning in the Classroom." *Middle School Journal* 26/2 (November 1994): 52-57.
- Riley, J.P., II. "The Effects of Teachers' Wait-Time and Knowledge Comprehension Questioning on Science Achievement." *Journal of Research in Science Teaching* 23/4 (April 1986): 335-342.
- Ristow, R.S. "The Teaching of Thinking Skills: Does It Improve Creativity?" *Gifted Child Today* 11/2 (March/ April 1988): 44-46.
- Robinson, I.S. *A Program to Incorporate High-Order Thinking Skills into Teaching and Learning for Grades K-3*. Fort Lauderdale, FL: Nova University, 1987 (ED 284 689).
- Rodd, J. "Encouraging Young Children's Critical and Creative Thinking Skills: An Approach in One English Elementary School." *Childhood Education* 75/6 (1999),350-354. v75 n6 p350-54 1999
- Rosenholtz, S.J. "School Success and the Organizational Conditions of Teaching." *American Journal of Education* 93/3 (May 1985): 352-387.
- Rosenholtz, S.J. "Workplace Conditions That Affect Teacher Quality and Commitment: Implications for Teacher Induction Programs." *The Elementary School Journal* 89/4 (March 1989b): 421-439.
- Rosenholtz, S.J. *Teachers' Workplace: The Social Organization of Schools*. New York, NY: Longman, 1989a.
- Rosenshine, B. "Content, Time and Direct Instruction." In *Research on Teaching: Concepts, Findings and Implications*, edited by P.L. Peterson and H.J. Walberg. Berkeley, CA: McCutchan, 1979.
- Rosenshine, B. "Recent Research on Teaching Behaviors and Student Achievement." *Journal of Teacher Education* 27/1 (Spring 1976): 61-64.
- Rosenshine, B. "Teaching Functions in Instructional Programs." *Elementary School Journal* 83/4 (March 1983): 335-351.
- Rosenshine, B., and Stevens, R. "Teaching Functions." In *Handbook of Research on Teaching, Third Edition*, edited by M.C. Wittrock. New York, NY: Macmillan, 1986, 376-391.
- Rosenshine, B., ET AL. "Teaching Students to Generate Questions: A Review of the Intervention Studies." *Review of Educational Research* 66/2 (Summer 1996): 181-221.
- Rubenstein, M.C., and Wodatch, J.K. *Stepping Up to the Challenge: Case Studies of Educational Improvement in Title I Secondary Schools*. Washington, DC: Policy Studies Associates, Inc., 2000 (ED 446 191).
- Rupe, V.S. *A Study of Computer-Assisted Instruction: Its Uses, Effects, Advantages, and Limitations*. South Bend, IN: Indiana University, 1986 (ED 282 513).

- Rutter, M.; Maughan, B.; Mortimore, P.; and Ouston, J. *Fifteen Thousand Hours: Secondary Schools and Their Effects on Children*. Cambridge, MA: Harvard University Press, 1979.
- Sammons, P.; Hillman, J.; and Mortimore, P. *Key Characteristics of Effective Schools: A Review of School Effectiveness Research*. London, England: International School Effectiveness and Improvement Centre, University of London, April 1995 (ED 389 826).
- Samson, G.E. "Effects of Training in Test-Taking Skills on Achievement Test Performance: A Quantitative Synthesis." *Journal of Educational Research* 78/5 (May/June 1985): 261-266.
- Samson, G.E.; Strykowski, B.; Weinstein, T.; and Walberg, H.J. "The Effects of Teacher Questioning Levels on Student Achievement: A Quantitative Synthesis." *Journal of Educational Research* 80/5 (May/June 1987): 290-295.
- Saracho, O.N. "Young Children's Academic Achievement as a Function of Their Cognitive Styles." *Journal of Research and Development in Education* 18/1 (Fall 1984): 44-50.
- Sarapuu, T., and Adojaan, K. Usage of Educational Web Pages To Develop Students' Higher Order Thinking Skills. Paper presented at the Society for Information Technology and Teacher Education International Conference. San Antonio, TX, February-March, 1999 (ED 432 231).
- Scheurich, J.J. "Highly Successful and Loving, Public Elementary Schools Populated Mainly by Low-SES Children of Color: Core Beliefs and Cultural Characteristics." *Urban Education* 33/4 (November 1998): 451-491.
- Schlechty, P.C. "District Level Policies and Practices Supporting Effective School Management and Classroom Instruction." In *Reading for Excellence: An Effective Schools Sourcebook*, edited by R.M.J. Kyle. Washington, DC: National Institute of Education, 1985.
- Schmitt, D.R. *The Effect a Principal Has on the Effective School Program*. Paper presented at the Annual Meeting of the Association of Louisiana Evaluators, New Orleans, LA, September 1990 (ED 330 089).
- Schrag, J.A. *Inputs and Processes in Education: A Background Paper*. Final Report Deliverable #1-2.2b. Alexandria, VA: National Association of State Directors of Special Education, January 1999 (ED 427 453).
- Schunk D.H., and Swartz, C.W. "Goals and Progress Feedback: Effects on Self-Efficacy and Writing Achievement." *Contemporary Educational Psychology* 18/3 (July 1993): 337-354.
- Schunk, D.H. "Enhancing Self-Efficacy and Achievement through Rewards and Goals: Motivational and Informational Effects." *Journal of Educational Research* 78/1 (September/October 1984a): 29-34.
- Schunk, D.H. "Reward Contingencies and the Development of Children's Skills and Self-Efficacy." *Journal of Educational Psychology* 75/4 (August 1983): 511-518.
- Schunk, D.H. "Sequential Attributional Feedback and Children's Achievement Behaviors." *Journal of Educational Psychology* 76/6 (December 1984b): 1159-1169.
- Scruggs, T.E.; White, K.R.; and Bennion, K. "Teaching Test-taking Skills to Elementary-Grade Students: A Meta-analysis." *The Elementary School Journal* 87/1 (September 1986): 69-82.

- Shayer, M. *The Long-Term Effects of Cognitive Acceleration on Pupils' School Achievement*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, March 1997 (ED 408 195).
- Sheldon, J.P. "A Secondary Agenda in Classroom Activities: Having Students Confront Their Biases and Assumptions." *Teaching of Psychology* 26/3 (1999): 209-211.
- Sheppard, B. "Exploring the Transformational Nature of Instructional Leadership." *Alberta Journal of Educational Research* 42/4 (December 1996): 325-344.
- Sidelinger, R.J., and McCroskey, J.C. "Communication Correlates of Teacher Clarity in the College Classroom," *Communication Research Reports* 14/1 (Winter 1997): 1-10.
- Sink, C.A. ET AL. Self-Regulated Learning and Academic Performance in Middle School Children." Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, April 1991 (ED 334 270).
- Slate, J.; Algozzine, B.; and Lockavitch, J.F. "Effects of Intensive Remedial Reading Instruction." *Journal of At-Risk Issues* 5/1 (Summer/Fall 1998): 30-35.
- Slavin, R.E. "Effects of Biracial Learning Teams on Cross-Racial Friendships." *Journal of Educational Psychology* 71/3 (June 1979a): 381-387.
- Slavin, R.E. "Quality, Appropriateness, Incentive, and Time: A Model of Instructional Effectiveness." *International Journal of Educational Research* 21 (1994a): 141-157.
- Slavin, R.E. *Effects of Individual Learning Expectations on Student Achievement*. Report No. 288. Baltimore, MD: Center for Social Organization of Schools, Johns Hopkins University, 1979b (ED 189 118).
- Slavin, R.E., and Fashola, O.S. *Show Me the Evidence! Proven and Promising Programs for America's Schools*. Baltimore, MD: Center for Research on the Education of Students Placed At Risk, Johns Hopkins University (ED 421 488).
- Smith, J., and Lee, V. *High School Restructuring and the Equitable Distribution of Achievement*. Revised. Madison, WI: Center on Organization and Restructuring of Schools, February 1996 (ED 397 489).
- Snapp, J.C., and Glover, J.A. "Advance Organizers and Study Questions." *Journal of Educational Research* 83/5 (May/June 1990): 266-271.
- Snell, L. *Remedial Education Reform: Private Alternatives to Traditional Title I*. Policy Study No. 266. Los Angeles, CA: Reason Public Policy Institute, January 2000 (ED 439 161).
- Snyder, S.; Bushur, L.; Hoeksema, P.; Olson, M.; Clark, S.; and Snyder, J. *The Effect of Instructional Clarity and Concept Structure on Student Achievement and Perception*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, April 1991 (ED 331 809).
- Sparks, D., and Loucks-Horsley, S. "Models of Staff Development." In *Handbook of Research on Teacher Education*, edited by W.R. Houston. New York, NY: Macmillan, 1990, 234-250.
- Sparks, G.M. "Synthesis of Research on Staff Development for Effective Teaching." *Educational Leadership* 41/3 (November 1983): 65-72.
- Sparks, G.M. "The Effectiveness of Alternative Training Activities in Changing Teaching Practices." *American Educational Research Journal* 23/2 (Summer 1986): 217-225.
- Speck, M. "Best Practice in Professional Development for Sustained Educational Change." *ERS Spectrum* 14/2 (Spring 1996): 33-41.

- Stahl, S.A., and Clark, C.H. "The Effects of Participatory Expectations in Classroom Discussion on the Learning of Science Vocabulary." *American Educational Research Journal* 24/4 (Winter 1987): 541-555.
- Stallings, J.A. "A Study of Implementation of Madeline Hunter's Model and Its Effects on Students." *Journal of Educational Research* 78/6 (July/August 1985c): 325-337.
- Stallings, J.A. "Effective Elementary Classroom Practices." In *Reaching for Excellence: An Effective Schools Sourcebook*. Washington, DC: National Institute of Education, May 1985a.
- Stennett, R.G. *Computer Assisted Instruction: A Review of the Reviews. Research Report 85-01*. London, ON: London Board of Education, Educational Research Services, 1985 (ED 260 687).
- Sternberg, R.J., and Bhana, K. "Synthesis of Research on the Effectiveness of Intellectual Skills Programs: Snake-Oil Remedies or Miracle Cures?" *Educational Leadership* 44/2 (October 1986): 60-67.
- Sternberg, R.J.; Torff, B; and Grigorenko, E.L. "Teaching Triarchically Improves School Achievement." *Journal of Educational Psychology* 90/3 (September 1998): 374-384.
- Stevens, B. (ed.). *School Effectiveness: Eight Variables that Make a Difference*. Lansing, MI: Michigan State Board of Education, 1985 (ED 257 218).
- Stevenson, R.B. "Staff Development for Effective Secondary Schools: A Synthesis of Research." *Teaching and Teacher Education* 3/3 (1987): 233-248.
- Stiller, J.D., and Ryan, R.M. *Teachers, Parents, and Student Motivation: The Effects of Involvement and Autonomy Support*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 1992 (ED 348 759).
- Streeter, B.B. "The Effects of Training Experienced Teachers in Enthusiasm on Students' Attitudes Toward Reading." *Reading Psychology* 7/4 (1986): 249-259.
- Stringfield, S. "Attempting to Enhance Students' Learning: A Search for Valid Programs and Reliable Systemic Implementation Supports." In *A Handbook for Student Performance Assessment in an Era of Restructuring*, edited by R.E. Blum and J.A. Arter. Alexandria, VA: Association for Supervision and Curriculum Development, 1996, VIII-2: 1-6.
- Stringfield, S., and Teddlie, C. "A Time to Summarize: The Louisiana School Effectiveness Study." *Educational Leadership* 46/2 (October 1988): 43-49.
- Sweeney, W.J.; Ehrhardt, A.M.; Gardner, R. III; Jones, L.; Greenfield, R.; and Fribley, S. "Using Guided Notes with Academically At-Risk High School Students during a Remedial Summer Social Studies Class." *Psychology in the Schools* 36/4 (July 1999): 305-318.
- Swift, J.N., and Gooding, C.R. "Interaction of Wait-Time, Feedback and Questioning Instruction on Middle School Science Teaching." *Journal of Research in Science Teaching* 20/8 (November 1983): 721-730.
- Swift, J.N.; Swift, P.R.; and Gooding, C.T. *Two Effective Ways to Implement Wait Time*. Paper presented at the Annual Meeting of the National Association for Research in Science Teaching, French Lick Springs, IN, April 1984 (ED 260 898).

- Teddle, C.; Kirby, P.C.; and Stringfield, S. "Effective versus Ineffective Schools: Observable Differences in the Classroom." *American Journal of Education* 97/3 (May 1989): 221-236.
- Tenenbaum, G. "The Effect of Quality Instruction on Higher and Lower Mental Processes and on the Prediction of Summative Achievement." *Journal of Educational Research* 80/2 (1986): 105-114.
- Tenenbaum, G., and Goldring, E. "A Meta-Analysis of the Effect of Enhanced Instruction: Cues, Participation, Reinforcement and Feedback, and Correctives on Motor Skill Learning." *Journal of Research and Development in Education* 22/3 (Spring 1989): 53-64.
- Terry, P.M. *The Principal and Instructional Leadership*. Paper presented at the Annual Meeting of the National Council of Professors in Educational Administration, Corpus Christi, TX, August 1996 (ED 400 613).
- Thomas, J.W.; Strage, A.; and Curley, R. "Improving Students' Self-directed Learning: Issues and Guidelines." *The Elementary School Journal* 88/3 (January 1988): 313-326.
- Tobin, K., and Capie, W. *The Effects of Teacher Wait-Time and Questioning Quality on Middle School Science Achievement*. Paper presented at the Annual Meeting of the American Psychological Association, Montreal, PQ, September 1980 (ED 196 860).
- Tobin, K., and Capie, W. *Wait-Time and Learning in Science*. Burlington, NC: Carolina Biological Supply, 1981 (ED 221 353).
- Tomic, W. "Teaching Behavior and Student Learning Outcomes in Dutch Mathematics Classrooms." *Journal of Educational Research* 82/6 (July/August 1989): 339-347.
- Townsend, T. *The Next Generation of Schools: Getting There from Where We Are Now*. Paper presented at the Annual Meeting of the Australian Council for Educational Administration, Adelaide, Australia, February 1997 (ED 417 235).
- van Zee, E., and Minstrell, J. "Using Questioning To Guide Student Thinking." *Journal of the Learning Sciences* 6/2 (1997): 227-269.
- Venezky, R.L., and Winfield, L.F. "Schools That Succeed Beyond Expectations in Reading." In *Studies in Education*. Newark, DE: University of Delaware, 1979 (ED 177 484).
- Wade, R.K. "What Makes a Difference in Inservice Teacher Education? A Meta-Analysis of Research." *Educational Leadership* 42/4 (December 1984/January 1985): 48-54.
- Wagstaff, M.; Melton, J.; Lawless, B.; and Combs, L. *African-American Student Achievement Research Project*. Kilgore, TX: Education Service Center Region 7, 1998 (ED 425 256).
- Wang, M.C.; Haertel, G.D.; and Walberg, H.J. "What Helps Students Learn?" *Educational Leadership* 51/4 (December 1993/January 1994): 74-79.
- Warren, L.L., and Muth, K.D. "The Impact of Common Planning Time on Middle Grades Students and Teachers." *Research in Middle Level Education Quarterly* 18/3 (Summer 1995): 41-58.
- Waxman, H.; Wang, M.C.; Anderson, K.A.; and Walberg, H.J. "Synthesis of Research on the Effects of Adaptive Education." *Educational Leadership* 43/1 (September 1985): 26-29.
- Weade, R., and Evertson, C.M. "The Construction of Lessons in Effective and Less Effective Classrooms." *Teaching and Teacher Education* 4/3 (Summer 1988): 189-213.

- Weathersby, J., and Harkreader, S. *Staff Development and Student Achievement: Making the Connection*. Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Quebec, April 1999 (ED 430 918).
- Weber, G. *Inner City Children Can Be Taught to Read: Four Successful Schools. Occasional Paper No. 18*. Washington, DC: Council for Basic Education, 1971 (ED 057 125).
- Weinstein, C.E., and Meyer, R.E. "The Teaching of Learning Strategies." In *Handbook of Research on Teaching, Third Edition*, edited by M.C. Wittrock. New York, NY: Macmillan, 1986, 315-327.
- Weinstein, C.E.; Ridley, D.S.; Dahl, T.; and Weber, E.S. "Helping Students Develop Strategies for Effective Learning." *Educational Leadership* 46/4 (December 1988/January 1989): 17-19.
- Weller, L.D., and Weller, S.J. "Using Deming's Continuous Improvement Model To Improve Reading." *NASSP Bulletin* 81/589 (May 1997): 78-85.
- Weller, L.D., and Weller, S.J. Secondary School Reading: Using the Quality Principle of Continuous Improvement To Build an Exemplary Program. *NASSP Bulletin* 83/607 (May 1999): 59-68.
- Wendel, F.C.; Hoke, F.A.; and Joekel, R.G. *Outstanding School Administrators: Their Keys to Success*. Westport, CT: Praeger, 1996.
- WestEd. *Teachers Who Learn, Kids Who Achieve: A Look at Schools with Model Professional Development*. San Francisco, CA: WestEd, 2000 (ED 440 102).
- Wharton-McDonald, R.; Pressley, M.; and Hampston, J.M. "Literacy Instruction in Nine First-Grade Classrooms: Teacher Characteristics and Student Achievement." *The Elementary School Journal* 99/2 (November 1998): 101-128.
- Williams, J.E. *Promoting Rural Students' Academic Achievements: An Examination of Self-Regulated Learning Strategies*. Paper presented at the Annual Meeting of the American Educational Research Association, April 1992 (ED 396 890).
- Williamson, R., and Smoak, E. "Creating a Down-to-Earth Approach to Teaching Science, Math and Technology." *Journal of Extension* 37/3 (June 1999). Available: <http://joe.org/joe/1999june/iw3.html>
- Wilson, B.L., and Corcoran, T.B. *Successful Secondary Schools: Visions of Excellence in American Public Education*. New York, NY: Falmer Press, 1988.
- Winne, P.H. "Experiments Relating Teachers' Use of Higher Cognitive Questions to Student Achievement." *Review of Educational Research* 49/1 (Winter 1979): 13-50.
- Wohlstetter, P., and Mohrman, S.A. *Assessment of School-Based Management. Volume I: Findings and Conclusions. Studies of Education Reform*. Los Angeles, CA: UCLA Center on Educational Governance, October 1996 (ED 397 530).
- Wolf, D.P., and White, A. "Charting the Course of Student Growth." *Educational Leadership* 57/5 (February 2000): 6-11.
- Wolf, P., and Supon, V. *Winning Through Student Participation in Lesson Closure*. Bloomsburg PA: Bloomsburg University, February 1994 (ED 368 694).
- Wolfe, P. "Revisiting Effective Teaching." *Educational Leadership* 56/3 (November 1998): 61-64.
- Wong, B.Y.L. "Self-Questioning Instructional Research: A Review." *Review of Educational Research* 55/2 (Summer 1985): 227-268.

- Woodle, L., Hartsoe, C.; and Taylor, L. *How Do We Help Our Students Become More Responsible. Research Brief #28*. Richmond, VA: Metropolitan Educational Research Consortium, January 1995 (ED 411 357).
- Woodward, J.; Carnine, D.; and Gersten, R. "Teaching Problem Solving Through Computer Simulation." *American Educational Research Journal* 25/1 (Spring 1988): 72-86.
- Woolnough, B.E.; McLaughlin, S.; and Jackson, S. "Learning by Doing—Two Classroom Studies of Pupils' Preferred Ways of Learning Science." *School Science Review* 81/294 (September 1999): 27-34.
- Yamzon, A. *An Examination of the Relationship between Student Choice in Project-Based Learning and Achievement*. San Rafael, CA: Dominican College, May 1999 (ED 430 940).
- Yei, C., Wang, K., and Huang, S. *A Comparative Study on the Use of Questioning Strategies between Beginning Teacher and Experienced Teacher*. Paper presented at the Annual Meeting of the National Association for Research in Science Teaching, San Diego, CA, April 1998 (ED 418 861).



**U.S. DEPARTMENT OF EDUCATION
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT (OERI)
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)**

REPRODUCTION RELEASE (Specific Document)

I. DOCUMENT IDENTIFICATION

Title: RESEARCH YOU CAN USE TO IMPROVE RESULTS: UPDATE OF SECTION 3
 Author(s): Kathleen Cotton
 Corporate Source (if appropriate): Northwest Regional Educational Laboratory Publication Date: 6/01

II. REPRODUCTION RELEASE

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche and paper copy (or microfiche only) and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the options and sign the release below.

CHECK
HERE

XX

Microfiche
(4" x 6" film)
and paper copy
(8 1/2" x 11")
reproduction

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
Northwest Regional
Educational Laboratory
TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

OR

Microfiche
(4" x 6" film)
reproduction
only

"PERMISSION TO REPRODUCE THIS
MATERIAL IN MICROFICHE ONLY
HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed in both microfiche and paper copy.

SIGN
HERE

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIC microfiche by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction of microfiche by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: Jerry D. Kirkpatrick II Printed Name: Jerry D. Kirkpatrick
 Organization: Director, Institutional Development and Communications
Northwest Regional Educational Laboratory
 Address: 101 S.W. Main St., Suite 500 Tel. No.: (503) 275-9517
Portland, OR Zip Code: 97204 Date: 7/5/01

III. DOCUMENT AVAILABILITY INFORMATION (Non-ERIC Source)

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents which cannot be made available through EDRS.)

Publisher/Distributor: _____
 Address: _____
 Price Per Copy: _____ Quantity Price: _____

IV. REFERRAL TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

