Introduction

This is the third edition of a research synthesis document that was first published by the Northwest Regional Educational Laboratory (NWREL) in 1984 and updated in 1990. This edition reflects educational research literature published within the past five years, together with inquiries into topical areas not investigated previously. Like its predecessors, this synthesis cites classroom, school, and district practices that research has shown to foster positive student achievement, attitudes, and social behavior.

The 1984 synthesis featured findings from the now-classic "school effectiveness" research conducted in the 1970s and early 1980s. That research studied effective and ineffective schools and classrooms with similar student populations and identified key differences in their organization, management, curriculum, and instruction.

The 1990 synthesis update retained that information, adding refinements to those earlier findings and results from other areas of investigation, such as questioning strategies, high-needs populations, and professional development for teachers.

This 1995 update augments previous work by identifying (1) additional findings in familiar topical areas and (2) findings on topics of more recent research interest. Among these newer areas of focus are:

- Curriculum integration
- Alternative assessment
- School-based management
- Prevention of substance abuse, dropping out, and social disruption
- Social and academic resiliency
- Higher-level thinking skills
- Attitudes and skills for workplace readiness
- Intercultural relations and multi-cultural learning.

Inevitably, the revision process also required the deletion of many bibliographic citations that appeared in the earlier versions in order to create space for newer entries. In culling the bibliography, we have attempted to retain classic and seminal reports, while removing many older, less rigorous, redundant, or difficult-to-find items.

The result of this work is that the assertions made in this synthesis are supported by more than 1,000 of the highest-quality and most useful studies and summaries available.

History

Originally, the synthesis was intended primarily as a support piece for schools receiving training in NWREL's Onward to Excellence (OTE) school improvement process. Staff of these schools now
numbering approximately 2,000 across the U.S. have used the synthesis to identify research-based practices that relate to the improvement goals they have set. They then plan, implement, and monitor the use of these practices, drawing upon additional research and the experience of others who have pursued similar goals.

Today, OTE is the best-known and one of the most highly regarded approaches to school improvement in the nation. OTE’s success is due largely to (1) its insistence that educational improvement efforts be research based and (2) its provision of a resource—this synthesis and its predecessors—that makes it feasible for busy school personnel to access and use research.

The widespread, successful use of the syntheses in OTE schools is, of course, very gratifying. Its use, however, has expanded considerably beyond this initial application. The synthesis is also disseminated through NWREL’s School Improvement Research Series (SIRS), a growing collection of research summaries and related articles distributed on either a single-purchase or subscription basis. As this edition of the synthesis goes to press, the combined sales of the first two editions total nearly 100,000 copies.

Participants in NWREL’s more recently developed district-level strategic improvement process, Creating the Future, are also making use of the synthesis, a practice that can be expected to increase with the growth of that program. Large but undocumented numbers of complimentary copies have been distributed to NWREL’s clients and colleagues over the years. And finally, the synthesis has been available since 1990 through the Educational Resources Information Center (ERIC) system (ED 347 613).

The Effective Schooling Research

The evidence that supports the assertions made in this synthesis come from several different kinds of research investigations. They include:

- **School effects research**: Studies of whole schools undertaken to identify schoolwide practices that help students learn
- **Teacher effects research**: Studies of teachers and students in the classroom to discover effective practices
- **Research on instructional leadership**: Studies of principals and other building leaders to determine what they do to support teaching and learning
- **Curriculum alignment and curriculum integration research**: Examinations of alternative methods of organizing and managing curriculum to determine effective approaches
- **Program coupling research**: Inquiries into the interrelationships among practices used at the district, school building and classroom levels
- **Research on educational change**: Studies to identify conditions and practices that promote significant, durable change in educational programs.

How to Use the Synthesis

This research synthesis describes characteristics and practices identified by research as associated with improvements in student performance. Findings are cited within three sections, each focused on one level of organization: the classroom, the school, and the district. Groups of practices derived from the
research have been organized into practice clusters (such as "Teachers Use a Preplanned Curriculum to Guide Instruction") and then into cluster groupings (such as "Instruction" and "Assessment").

At the end of each practice cluster are lists of sources from the research base which support the practices cited in that cluster. While these are not inclusive of all the reports reviewed in that topic area, they are of high quality, representative of the research base, relatively easy to retrieve, and therefore likely to be useful to those wanting to pursue a given topic in more detail. Full citations may be found in the bibliography at the end of this publication.

The findings summarized here will be of interest to persons exploring or involved in school improvement and restructuring efforts. The synthesis can stimulate discussion of instructional issues, guide the development of appropriate local improvements, and aid in decision making as school improvements take place. When integrated into a locally determined plan for action, these practices can be of significant assistance in the improvement of schools.

A word of caution: This booklet cannot legitimately be utilized as a checklist or instrument for evaluating the performance of individual teachers or principals, nor should it be used as a blueprint for local school improvement. It is not a simple recipe for school improvement, nor is it, in and of itself, a staff development program or a program for supervision.

The experience of those involved in OTE and other school improvement efforts does demonstrate, however, that the findings presented here are useful in helping to develop and actualize school improvement projects that bring about real change for the better. Research and experience both offer the clear and optimistic message that schools do make a difference and that, with an appropriate concentration of will and effort, teachers and administrators can substantially influence student success.

We suggest that readers review the research findings reported here and, based on local decisions and needs, use these findings to formulate processes that can lead to attainment of school goals.

How to Access the Research

Use of the research synthesis frequently leads readers to want to acquire materials identified in the bibliography. While we at NWREL are not able to provide these documents, we have taken steps to make it easier for users to locate them. This edition of the synthesis provides the most complete bibliographic information possible for each source cited, including journal volumes, numbers, months and years. ED numbers are provided for documents available through the ERIC system, and most hard-to-find or "fugitive" citations have been deleted. Finally, those items cited at the end of each practice cluster in the synthesis text have been selected partly for ease of access, and most can readily be retrieved at a county, university, or other well-stocked library.

Journal Articles and Books. These libraries, for example, should have many of the educational journals in which the articles in this bibliography appear. Local library staff can assist users to locate articles from these journals. Articles from journals the local library does not have can often be retrieved through interlibrary loan. Likewise, books cited in the bibliography can either be borrowed from the library or, for users who wish to acquire their own copies, can generally be found, along with price and ordering information, in Books in Print. School-based users are encouraged to contact their instructional media specialists for assistance in retrieving resources.
digits in parentheses refer to materials that have been photocopied and miniaturized on microfiche by ERIC staff. Local librarians can help readers locate the nearest ERIC microfiche collection.

Most documents can also be ordered, in either microfiche or hard-copy form, from: ERIC Document Reproduction Service, DynTel Corporation, 7420 Fullerton Road, Suite 110, Springfield, VA 22153-2852, 1-800-443-ERIC. Costs: Paper copy: $3.85 for each 25 pages or part thereof; Microfiche (each containing 96 pages): $0.25 each.

SIRS Materials. Some citations in this bibliography refer to "Close-Ups" and "Topical Syntheses" developed at NWREL. These articles are from NWREL's School Improvement Research Series (SIRS), of which this synthesis is also a part. Hard copy of the different "series" of SIRS materials are available for purchase from NWREL's Document Reproduction Service (contact information below), and some of them are also in the ERIC system. Finally, they are available on the Internet via the NWREL Web Site http://www.nwrel.org/scpd/sirs.

Additions to the SIRS materials on the Internet will be made as new documents are published.

Further Information and Ordering

NWREL's School, Community and Professional Development Program (SCPD) has developed the Onward to Excellence process referenced above for use by local schools in applying effective schooling research results to meet school improvement goals. Creating the Future, a program for district-level strategic improvement, is also being used profitably in the Northwest region and elsewhere to improve student performance. For further information about these programs or about the School Improvement Research Series, contact:

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Package of 50 copies: $211.80
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1. CLASSROOM CHARACTERISTICS AND PRACTICES

Teachers and students work together over time to extend and refine each learner's knowledge and skills.
Through careful preplanning, effective classroom management and instruction, positive teacher-student interactions, attention to equity issues, and regular assessment, teachers and students can achieve success.

1.1 PLANNING AND LEARNING GOALS

1.1.1 Teachers Use a Preplanned Curriculum to Guide Instruction.

Teachers:
- a. Develop and prioritize learning goals and objectives based on district and building guidelines, sequence them to facilitate student learning, and organize them into units or lessons.
- b. Establish timelines for unit or lesson objectives so they can use the calendar for instructional planning.
- c. Identify instructional resources and teaching activities, match them to objectives and student developmental levels, and record them in lesson plans.
- d. Identify alternative resources and activities, especially for priority objectives.
- e. Review resources and teaching activities for content and appropriateness and modify them as needed to increase their effectiveness in helping students learn.
- f. Arrange daily, weekly, monthly, and yearly activities on the calendar to assure that resources are available and instructional time is used wisely.

Behr and Bachelor (1981); Brophy and Good (1986); Byra and Coulon (1994); Callaway (1988); Denham and Lieberman (1980); Edmonds (1979a,b); Glatthorn (1993); Kallison (1986); Leithwood and Montgomery (1982, 1985); Mortimore, et al. (1988); Mortimore and Sammons (1987); Rosenshine (1976, 1983); Rosenshine and Stevens (1986); Sammons, Hillman, and Mortimore (1994); Sarason (1971); Shann (1990); Stallings (1985a, 1986); Veneky and Winfield (1979)

1.1.2 Teachers Provide Instruction that Integrates Traditional School Subjects, As Appropriate.

Teachers:
- a. Use thematic units as the organizing principles for instruction in agreed-upon areas.
- b. Include student input when determining themes around which to organize instruction.
- c. Engage students in projects requiring knowledge and skill across several traditional content areas.
- d. Make use of other resources, including hands-on materials, in addition to textbooks.
- e. Organize themselves into teams to plan and deliver instruction.
- f. Use performance assessments that allow students to demonstrate knowledge and skills from several traditional subject-matter areas.

Aschbacher (1991); Brophy and Alleman (1991); Friend (1985); Greene (1991); Henderson and Landesman (1992); Hough (1994); Ladewig (1987); Lake (1994); Lee and Smith (1993); Levitan (1991); MacIver (1990); Mansfield (1989); Martinez (1992); Meckler (1992); Smith, Johnson, and Rhodes (1993); Vars (1987); Vye (1990); Willett (1992); Williams, D. (1991)

1.2 CLASSROOM MANAGEMENT AND ORGANIZATION

1.2.1 Teachers Form Instructional Groups That Fit Students' Academic and Affective Needs.

Teachers:
- a. Use whole group instruction when introducing new concepts and skills.
- b. Form smaller groups as needed to make sure all students learn thoroughly. They place
students according to individual achievement levels for short-term learning activities; they
avoid underplacement.
c. Monitor their instructional approaches, so that students in lower groups still receive high-
quality instruction.
d. Review and adjust groups often, moving students when achievement levels change.
e. Form small groups for instruction and practice in the use of higher-order thinking skills.
f. Make use of heterogeneous cooperative learning groups, structuring these so that there are
both group rewards and individual accountability.
g. Set up peer tutoring and peer evaluation groups to use time effectively and to ensure that
students receive the assistance they need to learn successfully.
h. Ensure that learning groups exhibit gender, cultural, ability-disability, and socioeconomic
balance.

Bossert (1985, 1988a); Calfee and Brown (1979); Cohen, E. C. (1986); DiPardo and Freedman (1988); Fantuzzo, et al. (1989); Fielding and
Pearson (1994); García, E. E. (1990); Glatthorn (1989); Hallinan (1984); Hawkins, Douek, and Lishner (1988); Johnson, Johnson, and
Scott (1978); Johnson, et al. (1981); Katstra, Tollefson, and Gilbert (1987); Lazarowitz, et al. (1988); Lumpkins, Parker, and Hall (1991);
Madden, et al. (1993); Medley (1979); Rosenshine (1979, 1983); Rosenshine and Stevens (1986); Shann (1990); Sindelar, et al. (1984);

1.2.2 Teachers Make Efficient Use of Learning Time.

Teachers:
a. Allocate time to different content areas based on district and school goals.
b. Keep noninstructional time to a minimum by beginning and ending lessons on time,
keeping transition times short, and managing classrooms so as to minimize disruptive
behavior.
c. Set and maintain a brisk pace for instruction that remains consistent with thorough
learning. They introduce new objectives quickly, and provide clear start and stop cues to
pace lessons according to specific time targets.
d. Ask focused questions, provide immediate feedback and correctives, and engage students
in discussion and review of learning material.
e. Maintain awareness of the rest of the class when working with individuals or small
groups and take action as necessary to keep all students on task.
f. Present learning activities at a level that is neither too easy nor too difficult for the
majority of students, making adaptations to serve the needs of faster and slower learners.
g. Keep seatwork activities productive through careful preparation, active supervision, and
provision of assistance to students in such a way that others are not disturbed.
h. Encourage students to pace themselves. If students do not finish during class, teachers
request that they work on lessons before or after school, during lunch or at other times so
they keep up with what is going on in class.
i. Work with slower learners to reduce the amount of time needed for learning, e.g., by
teaching them effective study skills, mnemonic devices, etc.
j. Give short homework assignments to elementary students to build good study habits and
longer (45-120-minute) assignments to secondary students to reinforce learning. They check
homework for completion and to diagnose learning needs, but do not generally assign
grades.

Anderson, L. W. (1980, 1985); Berlinski (1979); Biedfeldt (1990); Brookover and Leotite (1979); Brophy (1986a,b); Brophy and Good
(1986); Brown and Saks (1986); Butler (1987); Cooper (1989); Denham and Lieberman (1980); Evertson (1985, 1989); Evertson and
Harris (1992); Gall, et al. (1990); Gettinger (1989); Good (1984); Hawley, et al. (1984); Helms and Schrader (1988); Karweit (1984,
1985); Knorr (1981); Kulik and Kulik (1988); Levine and Leotite (1990); McGarity and Butts (1984); Rosenshine (1978, 1979, 1983);
Sammons, Hillman, and Mortimore (1994); Slavin (1994a); Strother (1985); Stallings (1980); Teddle, Kirby, and Stringfield (1989);
Walberg (1988); Walberg, et al. (1985); Wang, Haertel, and Walberg (1993 -1994); Wyne and Stuck (1979)
1.2.3 Teachers Establish Smooth, Efficient Classroom Routines.

Teachers:

a. Plan rules and procedures before the school year begins and present them to students during the first few days of school.
b. Begin class quickly and purposefully, with assignments, activities, materials and supplies ready for students when they arrive.
c. Require students to bring the materials they need to class each day and assign storage space as needed.
d. Establish routines for handling administrative matters quickly and efficiently, with minimum disruption of instructional time.
e. Make smooth, rapid transitions between activities throughout the class period or school day.
f. Circulate around the room during seatwork activities, keeping students on task and providing help as needed.
g. Conduct periodic review of classroom routines and revise them as needed.

1.2.4 Teachers Set Clear Standards for Classroom Behavior and Apply Them Fairly and Consistently.

Teachers:

a. Set standards which are consistent with or identical to the building code of conduct.
b. Let students know that there are high standards for behavior in the classroom, and explain rules, discipline procedures, and consequences clearly.
c. Provide written behavior standards and teach and review them from the beginning of the year or the start of new courses.
d. Establish rules that are clear and specific; they avoid vague or unenforceable rules such as "be in the right place at the right time."
e. Provide considerable reteaching and practice of classroom rules and procedures for children in grades K-3.
f. Involve older students in helping to establish standards and sanctions.
g. Apply consistent, equitable discipline for all students, making certain that sanctions are clearly linked to students' inappropriate behavior.
h. Teach and reinforce positive, prosocial behaviors and skills, including self-control skills, especially with students who have a history of behavior problems.
i. Stop disruptions quickly, taking care to avoid disrupting the whole class.
j. Focus on students' inappropriate behavior when taking disciplinary action not on their personalities or histories.
k. Handle most disciplinary matters in the classroom, keeping referrals to administrators to a minimum.
l. Participate in training activities to improve classroom management skills.

Allen, J. D. (1986); Anderson, L. M. et al. (1980); Armor, et al. (1976); Bain, Lintz, and Word (1989); Bielefeldt (1990); Brophy (1979, 1986); Brophy and Good (1986); Brown, McIntyre, and McAlpine (1988); Doyle (1986); Edmonds (1979a); Emmer, et al. (1980a,b, 1982); Everson (1982a,b, 1985); Everson and Harris (1992); Everson, et al. (1982, 1985); Gersten and Carnine (1986); Good and Brophy (1986); Hawkins, Duweck, and Lishner (1988); Hawley, et al. (1984); Kounin (1977); Leinhardt, Weidman, and Hammond (1987); Medley (1979); Rosenshine (1983); Rosenshine and Stevens (1986); Sanford, Emmer, and Clements (1983); Sanford and Everson (1981); Wang, Hacertel, and Walberg (1993-1994)
1.3 INSTRUCTION

1.3.1 Teachers Carefully Orient Students to Lessons.

Teachers:

b. Help students get ready to learn. They 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. Challenge and inspire students to learn, particularly at the start of difficult lessons. They make certain that students know in advance what's expected and are ready to learn.
g. Use techniques such as advance organizers, study questions, and prediction to prepare students for learning activities.
h. Make students aware that they are expected to contribute to classroom discussions and other participatory activities.

1.3.2 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, avoiding digressions.
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.
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.
1.3.3 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.

b. Acknowledge correct responses during recitations and on assignments and tests.

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. Train students to provide each other feedback and reinforcement during peer tutoring activities.

1.3.4 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. Reteach priority lesson content until students show they've learned it.

d. Provide regular, focused reviews of key concepts and skills throughout the year to check on and strengthen student understanding.

e. Select computer-assisted instructional activities that include review and reinforcement components.

f. Address learning style differences during review and reteaching.

1.3.5 Teachers Use Validated Strategies to Help Build 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, developing cognitive maps, and using advance organizers.
   c. Teach strategies for problem solving, decision making, exploration, classification, hypothesizing and provide students opportunities to practice and refine these skills.
   d. Work with older students to develop metacognitive skills, so that they can examine their own thinking patterns and learn to make changes as needed.
   e. Ask higher-order questions and give students generous amounts of time to respond.
   f. Use instructional strategies such as probing, redirection, and reinforcement to improve the quality of student responses.
   g. Incorporate computer-assisted instructional activities into building thinking skills such as verbal analogy, logical reasoning, induction/deduction, elaboration, and integration.
   h. Maintain a supportive classroom environment in which students feel safe experimenting with new ideas and approaches.
   i. 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.

Bangert-Drowns and Bankert (1990); Barba and Merchant (1990); Baum (1990); Bransford, et al. (1986); Crump, Schlichter, and Palk (1988); Freeman (1990); Gall, et al. (1990); Haller, Child, and Walberg (1988); Hansler (1985); Herrnstein, et al. (1986); Horton and Ryba (1986); Hudgin and Edelman (1986); Kagan, D. M. (1988); Matthews (1989); MCREL (1985); Norris (1985); Pearson (1982); Pogrow (1988); Riding and Powell (1985, 1987); Ristow (1988); Robinson (1987); Snapp and Glover (1990); Sternberg and Bha (1986); Tenenbaum (1986); Wong (1985)

1.3.6 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. 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.
   d. Ask lower-cognitive questions that most students will be able to answer correctly when helping students to acquire factual knowledge.
   e. Ask a majority of higher-cognitive questions (50 percent or more) of students above the primary grades during classroom recitations.
   f. Allow generous amounts of "wait-time" when questioning students at least three seconds for lower-cognitive questions and more for higher-cognitive ones.
   g. Continue to interact with students whose initial responses are inaccurate or incomplete, probing their understanding and helping them to produce better answers.
   h. Make certain that both faster and slower learners have opportunities to respond to higher cognitive questions and are given sufficient wait-time.

Atwood and Wilen (1991); Brophy (1986b, 1987); Brophy and Good (1986); Ciardiello (1986); Cotton (1989a); Gall (1984); Good (1984); Honea (1982); Hoxmeier (1986); Johnston, Markle, and Haley- Oliphant (1987); 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); W inne (1979)
1.3.7 Teachers Integrate Workplace Readiness Skills into Content-Area Instruction.

Teachers:

a. Communicate to students of all age/grade levels that developing employability skills is important for everyone.

b. Focus on developing the higher-order skills required in the modern workplace: problem-solving and decision-making skills, learning strategies, and creative thinking.

c. Provide learning activities to foster the development of qualities such as dependability, positive attitude toward work, conscientiousness, cooperation, adaptability, and self-discipline.

d. Provide classroom environments for secondary students that replicate key features of real work settings.

e. Assign tasks like those carried out by people in real work settings.

f. Function as facilitators and coaches rather than lecturers or order givers, giving older students much of the responsibility for their own learning.

g. Base learning activities on students' learning needs and styles, rather than adhering rigidly to textbooks or lesson plans.

h. Teach the value of employability skills inductively, by having students experience how group projects are affected by the presence or absence of these skills.

i. Use work-based learning experiences to reinforce basic skills.

j. Select workplace problems to illustrate how basic academic skills are applied in real-world settings.

k. Demonstrate the relevance of learning material by showing how it relates to other courses and to workplace applications.

l. Organize the secondary curriculum around broad occupational themes/categories.


1.4 TEACHER-STUDENT INTERACTIONS

1.4.1 Teachers Hold High Expectations for Student Learning.

Teachers:

a. Set high standards for learning and let students know they are all expected to meet them. They assure that standards are both challenging and attainable.

b. Expect all students to perform at a level needed to be successful at the next level of learning; they do not accept that some students will fail.

c. Hold students accountable for completing assignments, turning in work, and participating in classroom discussions.

d. Provide the time, instruction, and encouragement necessary to help lower achievers perform at acceptable levels. This includes giving them learning material as interesting and varied as that provided for other students, and communicating warmth and affection to them.

e. Monitor their own beliefs and behavior to make certain that high expectations are communicated to all students, regardless of gender, socioeconomic status, race, or other personal characteristics. Teachers avoid unreliable sources of information about students' learning potential, such as the biases of other teachers.

f. Emphasize that different students are good at different things and reinforce this by having
them view each other's products and performances.

Bain, Lintz, and Word (1989); Bamburg (1994); Berliner (1979, 1985); Block (1983); Block and Burns (1976); Bloom (1976); Brookover, et al. (1979); Brophy (1983, 1987); Brophy and Good (1986); Cooper and Good (1983); Cooper and Tom (1984); Cotton (1986c); Edmonds (1979a,b); Gersten, Carnine, and Zordi (1986); Good (1982, 1987); Hawley, et al. (1984); Kerech, et al. (1991); Marshall and Weinstein (1985); Mortimore, et al. (1988); Paredes and Frazer (1992); Patriarca and Kragt (1986); Porter and Brophy (1988); Pratt and Hales (1986); Rosenshine (1983); Sammons, Hillman, and Mortimore (1994); Saracho (1991); Slavin (1994a); Stevens (1985); Teddlie, Kirby, and Stringfield (1989); Woolfolk and Brooks (1985)

1.4.2 Teachers Provide Incentives, Recognition, and Rewards to Promote Excellence.

Teachers:
  a. Define excellence by objective standards, not by peer comparison. They establish systems for consistent recognition of students for academic achievement and excellent behavior.
  b. Relate recognition and rewards to specific student achievements and use them judiciously. As with praise, teachers are careful not to use unmerited or random rewards in an attempt to control students' behavior.
  c. Provide incentives and rewards appropriate to the developmental level of students, including symbolic, token, tangible, or activity rewards.
  d. Make certain that all students know what they need to do to earn recognition and rewards. Rewards should be appealing to students, while remaining commensurate with their achievements, i.e., not too lavish.
  e. Present some rewards publicly and others privately; some immediately and some delayed to teach persistence.
  f. Make some rewards available to students on an individual basis, while allowing others to be earned by groups of students in some cooperative learning structures.


1.4.3 Teachers Interact with Students in Positive, Caring Ways.

Teachers:
  a. Pay attention to student interests, problems, and accomplishments in social interactions both in and out of the classroom.
  b. Encourage student effort, focusing on the positive aspects of students' answers, products, and behavior.
  c. Communicate interest and caring to students both verbally and through such nonverbal means as giving undivided attention, maintaining eye contact, smiling, and nodding.
  d. Encourage students to develop a sense of responsibility and self-reliance. They give older students, in particular, opportunities to take responsibility for school-related activities and to participate in making decisions about important school issues.
  e. Share anecdotes and incidents from their experience as appropriate to build rapport and understanding with students.

1.5 EQUITY

1.5.1 Teachers Give High-Needs Students the Extra Time and Instruction They Need to Succeed.

Teachers:

a. Use approaches such as tutoring, continuous progress and cooperative learning with young children to reduce the incidence of later academic difficulties.

b. Monitor student learning carefully to maintain awareness of students having frequent academic difficulty; they note problems and arrange for help as needed.

c. Communicate high learning and behavioral expectations to high-needs students and hold them accountable for meeting classroom standards.

d. Provide high-needs students with instruction in study skills and in the kinds of learning strategies used by successful students (e.g., summarizing, questioning, predicting, etc.).

e. Give high-needs students additional learning time for priority objectives whenever possible; students spend this time in interactive learning activities with teachers, aides, or peer tutors.


1.5.2 Teachers Support the Social and Academic Resiliency of High-Needs Students.

Teachers:

a. Communicate warmth and encouragement to high-needs students, comparing their learning with the students' own past performance rather than making comparisons with other students.

b. Work together to assure that each high-needs student has an ongoing supportive relationship with at least one school staff member.

c. Create opportunities for these students to develop supportive peer relationships and serve as peer resources to one another through activities such as youth service, cooperative learning, and peer and cross-age tutoring.

d. Teach problem-solving skills and provide opportunities for students to practice real-life application of these skills.

e. Help each student to develop an internal locus of control by calling attention to the relationship between individual effort and results.

f. Encourage family members and other key persons in the lives of high-needs students to continually express high expectations for their behavior and school achievement.

g. Encourage key people in these students' lives to involve them in making real and meaningful contributions to the family and community.


1.5.3 Teachers Promote Respect and Empathy Among Students of Different Socioeconomic and Cultural Backgrounds.

Teachers:
a. Work to ensure equity in learning opportunity and achievement for all socioeconomic and cultural groups.
b. Communicate positive regard for students of different groups by holding high expectations for all students and treating them equitably.
c. Provide multicultural education activities as an integral part of classroom learning.
d. Make use of culturally heterogeneous cooperative learning structures in which there is individual accountability and group recognition.
e. Provide learning activities designed to reduce prejudice and increase empathy among cultures, races, genders, socioeconomic levels, and other groups. These include use of print, video, and theatrical media which dramatize the unfairness of prejudice and present various groups in a positive light.
f. Teach critical thinking skills in relation to intercultural issues, e.g., they make students aware that prejudicial thinking is replete with fallacies of reasoning, such as overgeneralization.
g. Contribute to the development of students' self-esteem by treating them with warmth and respect and offering them opportunities for academic success.
h. Avoid using practices known to be detrimental to intercultural relations, such as long-term ability grouping and attempting to change attitudes through exhortation.

Allport (1954); Byrnes (1988); Cotton (1991a, 1992b); Davis (1985); DeVries, Edwards, and Slavin (1978); Gabelko (1988); Gallo (1989);

1.6 ASSESSMENT

1.6.1 Teachers Monitor Student Progress Closely.

Teachers:
a. Monitor student learning regularly, both formally and informally.
b. Focus their monitoring efforts on early identification and referral of young children with learning difficulties.
c. Require that students be accountable for their academic work.
d. Carefully align classroom assessments of student performance with the written curriculum and actual instruction.
e. Are knowledgeable about assessment methodology and use this knowledge to select or prepare valid, reliable assessments.
f. Use routine assessment procedures to check student progress. These include conducting recitations, circulating and checking students' work during seatwork periods, assigning and checking homework, conducting periodic reviews with students, administering tests, and reviewing student performance data.
g. Review assessment instruments and methods for cultural, gender, and other bias and make changes as needed.
h. Use assessment results not only to evaluate students, but also for instructional diagnosis, to find out if teaching methods are working, and to determine whether classroom conditions support student learning.
i. Set grading scales and mastery standards high to promote excellence.
j. Encourage parents to keep track of student progress.

Bain, Lintz, and Word (1989); Block, Effthim, and Burns (1989); Bloom (1974); Brookover (1979); Brophy and Good (1986); Cohen, S. A. (1994); Cohen, S. A., et al. (1989); Costa and Kallick (1992); Dillashaw and Okey (1983); Engman (1989); Evereston, et al. (1982, 1986); Fuchs and Fuchs (1986); Fuchs, Fuchs, and Tindall (1986); Good and Grouws (1979); Howell and McCollum-Gahley (1986); Mortimore,
1.6.2 Teachers Make Use of Alternative Assessments as well as Traditional Tests.

Teachers:
- Participate in staff development activities that prepare them to develop rubrics, establish standards, and design tasks.
- Communicate to students and parents that assessments involving performances and products are the best preparation for life outside of school.
- Begin by using alternative assessments on a small scale. They recognize that the best assessments are developed over time and with repeated use.
- Plan assessments as they plan instruction, not as an afterthought.
- Develop assessments that have instructional value as well as assessing student learning.
- Teach children the scoring systems that will be used to evaluate their work and allow them to practice using these systems for self- and peer assessment.
- Secure input from older students for establishing performance criteria.
- Involve students in peer assessment activities, such as peer editing.
- Collect assessments used profitably by others and use or adapt these for their own classrooms.

2. SCHOOL CHARACTERISTICS AND PRACTICES

The qualities of the school as a whole can either enhance or detract from the learning environment. Key factors in support of student success include efficient planning and clear goals, validated organization and management practices, strong leadership and continuous improvement, positive staff and student interactions, a commitment to educational equity, regular assessment, support programs, and positive relationships with parents and community members.

2.1 PLANNING AND LEARNING GOALS

2.1.1 Everyone in the School Community Emphasizes the Importance of Learning.

Administrators and teachers:
- Have high expectations for student achievement; all students are expected to work hard to attain priority learning goals.
- Continually express expectations for improvement of the instructional program.
- Emphasize academic achievement when setting goals and school policies.
- Develop mission statements, slogans, mottos, and displays that underscore the school's academic goals.
- Focus on student learning considerations as the most important criteria for making decisions.
2.1.2 Administrators and Teachers Base Curriculum Planning on Clear Goals and Objectives.

Administrators and teachers:

a. Define learning goals and objectives clearly and display them prominently. They use building curriculum and district curriculum resources, when available, for instructional planning.

b. Establish clear relationships among learning goals, instructional activities, and student assessments and display these in written form.

c. Engage in collaborative curriculum planning and decision making, focusing on building continuity across grade levels and courses; teachers know where they fit in the curriculum.

d. Work with each other, the students, and the community to promote understanding of the curriculum and the priorities within it.

e. Conduct periodic curriculum alignment and review efforts to ensure congruence with school and district goals.

2.1.3 Administrators and Teachers Integrate the Curriculum, as Appropriate.

Administrators and teachers:

a. Explore the feasibility of integrating traditional subject-area content around broad themes, and identify areas where this approach is appropriate.

b. Arrange time for teacher teams to work on integrating curriculum, plan instructional strategies, and develop assessments.

c. Make other resources available for use in integrated curriculum units in addition to textbooks.

d. Pursue curriculum integration gradually, so that staff can make adjustments, gain feelings of ownership, and evaluate the success of each effort.

e. As with any innovation, inform parents and community of the research and experience supporting curriculum integration and engage their support.

2.1.4 Administrators and Teachers Provide Computer Technology for Instructional Support and Workplace Simulation.

Administrators and teachers:

a. Receive training to enable them to use computer-assisted instruction effectively.

b. Use computer-assisted instruction as a supplement to not a replacement for traditional, teacher-directed instruction.

c. Provide computer activities that simulate workplace conditions and tasks to build
employability skills for all students.

d. Make use of computers and word processing software to foster the development of writing skills.

e. Provide high-interest drill-and-practice programs to support learning, especially with students requiring skill remediation.

f. Provide computer-assisted instructional activities for chronically misbehaving students and students with negative attitudes toward traditional learning methods.

Bangert-Drowns (1985); Bangert-Drowns, Kulik, and Kulik (1985); Bahr and Rieth (1989); Bennett (1991); Bialo and Sivin (1980); Braun (1990); Capper and Copple (1985); Darter and Phelps (1990); Dickinson (1986); Ehman and Glen (1987); Fletcher, Hawley, and Piele (1990); Gore, et al. (1989); Keuper (1991); Kinnaman (1990); Kulik and Kulik (1987, 1991); Liao (1992); Mevarech and Rich (1985); Robertson (1987); Roblyer (1989); Rodrigues and Rodrigues (1986); Rupe (1986); Ryan (1991); Stenner (1985); Woodward, Carnine, and Gersten (1988)

2.1.5 Administrators and Teachers Include Workplace Preparation Among School Goals.

Administrators and teachers:

a. Recognize the importance of developing employability skills in all students, regardless of their postsecondary plans.

b. Include age-appropriate activities to develop workplace readiness skills at all levels, K-12.

c. Ensure that students develop the higher-order skills in demand in the modern workplace, problem-solving and decision-making skills, learning strategies, and creative thinking.

d. Give special emphasis to the development of qualities required for workplace success, dependability, positive attitude toward work, conscientiousness, cooperation, adaptability, and self-discipline.

e. Provide, for secondary students, learning environments that replicate key features of real work settings.

f. Give older students tasks which approximate those performed by people in real work settings.

g. Ensure that teachers have considerable autonomy in establishing learning activities, classroom design, and instructional approaches.

h. Assist secondary students in preparing and updating their written career plans to identify their future educational and occupational directions.

I. Help students to reflect on their school- and community-based learning experiences.


2.2 SCHOOL MANAGEMENT AND ORGANIZATION

2.2.1 A School-Based Management Team Makes Many of the Decisions Regarding School Operations.

Team members:

a. Have the support of the district to make school-level decisions, provided these are in keeping with legal mandates and district goals.

b. Are broadly representative, including supportive administrators, teachers, other school staff, parent and community members, and students.
c. Communicate to constituents what school-based management is and secure their support.
d. Receive district-sponsored training in legal requirements, school operations, and group process skills.
e. Assume decision-making responsibility gradually, i.e., in one governance area (curriculum, instruction, budget, etc.) at a time.
f. Function as a true decision-making body rather than merely an advisory one, e.g., the principal does not have veto power over team decisions.
g. Involve teacher participants in decision making about their areas of expertise (curriculum and instruction) and avoid involving them in relatively trivial administrative matters.
h. Receive recognition for the increased effort that school-based management requires of participants.


2.2.2 Administrators and Teachers Group Students in Ways That Promote Effective Instruction.

Administrators and teachers:
a. Place students in heterogeneous groups for required subjects and courses; they avoid underplacement of students.
b. Make use of instructional aides and grouping strategies to keep the student/adult ratio low, especially during instruction aimed at priority objectives.
c. Provide in-class instruction in small groups for low achievers whenever possible to promote academic success and avoid the stigma often associated with pull-out classes.
d. Make certain that ability groups, when used, are short term and that student placement is reviewed frequently for appropriateness.
e. Avoid the practice of long-term academic tracking, which research has shown to have negative effects on the achievement and attitudes of the majority of students.
f. Are aware of the many social and academic benefits of multiage (nongraded) grouping, especially for primary-level children, and at least explore the possibility of implementing this structure.

Abadzâ (1984, 1985); Affleck, et al. (1988); Brookover and Lezotte (1979); Brown, K. S., and Martin (1989); California SDE (1977); Cohen, E. C. (1986); Cotton (1993b); Eames (1989); Everton (1992); Gamoran (1987, 1992); Gamoran and Berends (1987); Garcia (1990); Gutierrez and Slavin (1992); Haller (1985); Hallinan (1984); Hawley, et al. (1984); Levine and Lezotte (1990); Miller, B. A. (1990); Oakes (1985, 1986a,b); Oakes, et al. (1990); Pavan (1992a,b); Peterson, P. L., Wilkinson, and Hallinan (1984); Schneider (1989); Slavin (1987a,b, 1993, 1994b); Slavin, et al. (1993); Sorenson and Hallinan (1986); Webb (1980); Winsler and Espinosa (1990)

2.2.3 Administrators and Teachers Assure That School Time is Use for Learning.

Administrators and teachers:
a. Schedule school events so as to avoid disruption of learning time.
b. Emphasize the importance of protecting learning time when interacting with each other and with parents and students.
c. Allocate school time for various subjects based on school and district goals and monitor time use to make certain allocations are followed.
d. Organize the school calendar to provide maximum learning time. They review potential new instructional programs and school procedures for their likely impact on learning time prior to adoption.
e. Keep unassigned time and time spent on noninstructional activities to a minimum during
the school day; they keep loudspeaker announcements and other administrative intrusions brief and schedule them for minimal interference with instruction.
f. Ensure that the school day, classes, and other activities start and end on time.
g. Participate in inservice to improve their skills in making appropriate time allocations, managing students' behavior, and increasing student time on task.
h. Keep student pull-outs from regular classes to a minimum for either academic or nonacademic purposes, and monitor the amount of pull-out activity.
i. Provide extra learning time outside of regular school hours for students who need or want it.
j. Establish and enforce firm policies regarding tardies, absenteeism, and appropriate classroom behavior to maximize instructional time.


2.2.4 Administrators and Teachers Establish and Enforce Clear, Consistent Discipline Policies.

Administrators and teachers:
a. Provide a written code of conduct specifying acceptable student behavior, discipline procedures, and consequences. They make certain that students, parents and all staff members know the code by providing initial trainings and periodic reviews of key features.
b. Work to create a warm, supportive school environment. The principal, in particular, is visible and personable in interactions with staff and students.
c. Administer discipline procedures quickly following infractions, making sure that disciplinary action is consistent with the code and that all students are treated equitably. They take action on absenteeism and tardiness quickly, normally within a day.
d. Deliver sanctions that are commensurate with the offense committed.
e. Make certain that students understand why they are being disciplined, in terms of the code of conduct.
f. Carry out discipline in a neutral, matter-of-fact way, focusing on the student's behavior rather than personality or history.
g. Develop and use methods for providing positive reinforcement for appropriate behavior, particularly for those students with a history of behavior problems.
h. Assist students with behavior problems to develop social interaction, self-control, and anger management skills.
i. Avoid expulsions and out-of-school suspensions whenever possible, making use instead of in-school suspension accompanied by assistance and support.
j. Engage in problem solving with each other and with students to address discipline issues, focusing on causes rather than symptoms.
k. Strike agreements with parents about ways to reinforce school disciplinary procedures at home.
l. Adapt any commercial discipline programs used so that they match local circumstances and needs.
m. Develop and implement, as needed, projects to prevent violence and gang activity.
n. Engage in training activities to improve skills in prevention and remediation of violence and other discipline problems.

Bain, H. P., and Jacobs (1990); Block (1983); Bood (1992); Brookover and Lentz (1979); Cantrell and Cantrell (1993); Corcoran (1985); Cotton (1990b); Doyle (1989); Duke (1989); Edmonds (1979a,b, 1982); Edmonds and Frederiksen (1979); Fenley, et al. (1993); Good and Brophy (1986); Gottfredson, D. C. (1987); Gottfredson, D. C., Gottfredson, and Hybl (1993); Hawley, et al. (1984); Lasley and Wayson (1982); Leach and Byrne (1986); Leming (1993); Levine and Eubanks (1989); Levine and Lentz (1990); Madden, Lawson, and Sweet
2.2.5 Administrators and Teachers Provide a Pleasant Physical Environment for Teaching and Learning.

Administrators and teachers:

a. Arrange for physical facilities to be kept clean and reasonably attractive; damage is repaired immediately.

b. Arrange for hallways and classrooms to be cheerfully decorated with student products, seasonal artwork, posters depicting positive values and school spirit, etc.

c. Provide classroom, meeting, and storage space sufficient for teaching and learning, conferences, inservice activities, etc.

d. Secure staff and student input periodically on facilities needs—repair, replacement, refurbishing, temperature, cleanliness, etc.

e. Subdivide large facilities into smaller sections to facilitate communication and reduce isolation.

2.3 LEADERSHIP AND SCHOOL IMPROVEMENT

2.3.1 Leaders Undertake School Restructuring Efforts as Needed to Attain Agreed-upon Goals for Students.

Administrators and other leaders:

a. Review school operations in light of agreed-upon goals for student performance.

b. 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.

c. Identify kinds of staff development needed to enable school leaders and other personnel to bring about desired changes.

d. Study restructuring efforts conducted elsewhere for ideas and approaches to use or adapt.

e. Consider school contextual factors when undertaking restructuring efforts 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.

2.3.2 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. Know and can apply validated teaching and learning principles; they model effective teaching practices for staff as appropriate.
f. Know educational research, emphasize its importance, share it, and foster its use in problem solving.
g. Seek out innovative curricular programs, observe these, acquaint staff with them, and participate with staff in discussions about adopting or adapting them.
h. 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.
i. 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.
j. 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.
k. 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.
l. 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.

Andrews and Soder (1987); Bamburg and Andrews (1991); Berman and McLaughlin (1979); Biester, et al. (1984); Bossert (1988b); Brookover (1979b, 1981); Brookover and Lotte (1979); Brundage (1979); Cawelti (1987); Corbett, et al. (1984); Cohen, S. A. (1994); Cohen, S. A., et al. (1989); Crisci, et al. (1988); DeBevoise (1984); Drulian and Butler (1987); Eberts and Stone (1988); Edmonds (1979a); Emrick (1977); Everson, et al. (1986); Fullan (1994); Glasman (1984); Good and Brophy (1986); Krug (1992); Hallinger, Bickman, and Davis (1989); Hawley, et al. (1984); Heck (1992); High and Achilles (1986); Larsen (1987); Leithwood and Montgomery (1982, 1985); Levine and Lotte (1990); Little (1982); Louis and Miles (1989); Madden, Lawson, and Sweet (1976); Ogawa and Hart (1985); Pavan and Reid (1991, 1994); Purkey and Smith (1983); Rosenholtz (1987, 1989a,b); Sammons, Hillman, and Mortimore (1994); Schmitt, (1990); Venezky and Winfield (1979); Weber (1971)

2.3.3 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. 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.
c. 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.
d. Review programs and practices shown to be effective in other school settings for their potential in helping to meet school needs.
e. Specify clearly the roles and responsibilities for the various aspects of the school improvement effort.
f. Check implementation carefully and frequently, note and publicize progress, and modify
activities to make things work better.
g. Secure and encumber resources to support improvement activities, acquire resources from many sources including the community, and make resource allocations based on instructional priorities.
h. Renew or redirect the improvement focus as goals are achieved, report and celebrate success, and work with staff to establish new goals.
i. 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.
j. Provide periodic events to acknowledge and celebrate successes and to renew interest and energy for continued school improvement work.

Bamburg and Andrews (1989, 1991); Berman and McLaughlin (1979); Biester, et al. (1984); Bossert (1982, 1988); Boyd (1992); Brookover (1979b); Brundage (1979); David (1989); Deal and Peterson (1993); Edmonds (1979a, b); Emrick (1977); Everson, et al. (1986); Everson (1986); Fullan (1992, 1994); Gall, et al. (1985); Good and Brophy (1985); Hord (1990, 1992); Hord and Huling-Austin (1986); Leithwood and Montgomery (1982); Levine (1990); Levine and Lott (1990); Little (1981, 1982); Louis and King (1993); Louis and Miles (1989); Madden, Lawson, and Sweet (1976); Murphy and Hallinger (1993); Oakes (1989); Pavan and Reid (1994); Purkey and Smith (1983); Rosenholtz (1985, 1989a, b); Sparks (1983, 1986); Stringfield and Teddlie (1988); Venezky and Winfield (1979); Weber (1971)

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

Administrators and other leaders:
a. Make resources available to support ongoing programs of professional development for staff.
b. Set aside time for staff development activities, with at least part of that time made available during the regular work day.
c. Solicit and use staff input for the content of professional development activities; staff must feel the activities are relevant to them in order to benefit.
d. Provide activities that enhance teacher's capabilities in the major areas of technical repertoire, reflective practice, application of research, and collaborative skills.
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 and report outcomes.
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 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; communicate the expectation that staff members will routinely share ideas and work together to improve the instructional program.

Bamburg and Andrews (1991); Bennett (1987); Block (1983); Boyd (1992); Butler (1989, 1992); Corcoran (1985); David (1989); Deal and
2.4 ADMINISTRATOR-TEACHER-STUDENT INTERACTIONS

2.4.1 Administrators Communicate High Expectations for Teacher Performance.

Administrators:

a. Promote a schoolwide belief that all students can be successful learners and work with teachers to meet the challenge of teaching them.

b. Negotiate individual professional growth goals with each teacher. They use written supervision and evaluation procedures, and all staff receive feedback on performance at least annually.

c. Use guidelines made in advance for conducting classroom observation. They provide feedback quickly, placing emphasis on improving instruction and increasing student achievement.

d. Establish troubleshooting routines to help staff get quick resolution of instruction-related concerns.

e. Hold high expectations of themselves, assuming responsibility for student outcomes and making themselves visible and accessible to staff, students, parents, and community members.

2.4.2 Administrators and Other Leaders Provide Incentives, Recognition, and Rewards to Build Strong Staff Motivation.

Administrators and other leaders:

a. Recognize excellence in teaching, using school objectives and explicit criteria to make judgments. They include student achievement as an important criterion for determining teacher success.

b. Provide incentives and rewards to teachers who expand their knowledge and expertise by taking credit classes, applying for grants, or pursuing other professional development activities.

c. Conduct both formal and informal staff recognition, with at least some rewards made publicly.

d. Review incentive structures periodically to insure equity and effectiveness.

2.4.3 Administrators and Teachers Communicate High Expectations to Students and Recognize Excellent Performance on a Schoolwide Basis.
Administrators and teachers:
a. Communicate warmth and caring to all students by learning their names and something about their strengths, interests, and needs.
b. Exhibit warmth and caring for each other in the presence of students to provide a model for them.
c. Communicate to students that they are important and valued through providing activities to develop good health habits and self-esteem, as well as prevention activities regarding dropping out, pregnancy, drugs, and violence.
d. Recognize and reward excellence in achievement and behavior. They ensure that requirements for awards are clear, that explicit procedures are used, and that evaluations are based on standards rather than comparisons with peers.
e. Provide opportunities for all students to excel in their areas of strength and receive recognition.
f. Match incentives and rewards to student developmental levels, ensuring that they are meaningful to recipients and structured to build persistence of effort and intrinsic motivation.
g. Allow older students considerable opportunity to manage their own learning and provide input into school policies and operations.


2.5 EQUITY

2.5.1 Administrators and Teachers Provide Programs and Support to Help High-Needs Students Achieve School Success.

Administrators and teachers:
a. Focus on prevention of learning problems rather than remediation. Prevention programs featuring tutoring and/or small group instruction in reading are provided for young children.
b. Emphasize exploration, language development, and play in programs for pre-schoolers; kindergarten programs feature language and prereading skills using structured, comprehensive approaches.
c. Place high-needs students in comprehensive programs featuring detailed teachers' manuals, curriculum materials, lesson guides, and other support materials; they assure that these students are offered systematic alternatives to traditional instruction.
d. Place high-needs students in small classes (22 or fewer students) whenever possible.
e. Use proven methods such as continuous progress and cooperative learning to promote these students' learning success.
f. Carefully coordinate programs and activities for high-needs students (e.g., Chapter 1) with regular classroom activities.
g. Provide high-needs students instruction in test-taking skills and provide them activities to reduce test-taking anxiety.
h. Provide alternative learning arrangements which engage the special interests of older students (e.g., "school-within-a-school," off-campus activities).
i. Provide programs for older students which incorporate validated approaches such as peer, cross-age and volunteer tutoring and computer-assisted instruction.
j. Avoid retention in grade until all other alternatives have been considered and found
inadequate.
k. Use pull-out programs judiciously, if at all, assuring that they are intensive, brief, and
designed to catch students up with their peers quickly and return them to regular
classroom environments, not to support them indefinitely. l. Use findings from ongoing monitoring
efforts to adapt instruction to students' individual needs.

Allington and Johnston (1989); Bain and Jacobs (1990); Becker (1987); Brophy (1982); Chall and Snow (1988); Cotton (1989c); Crawford
(1989); Cuban (1989); DeVinney and Butler (1987); Gall, et al. (1990); Glaser, et al. (1992); Gottfredson, G. D. (1988); Griswold, Cotton, and
Hansen (1986); Honig (1989); Knapp, Turnbull, and Shields (1990); Levine and Eubanks (1989); Levine, Levine, and Eubanks (1987);
Madden, et. al. (1993); McPartland and Slavin (1990); NCRVE (1989); Nye, et al. (1992); Robinson (1990); Rowan and Guthrie (1989);
Slavin (1987b, 1989a, 1994); Slavin and Madden (1989); Slavin, Karweit, and Madden (1989); Slavin, Karweit, and Wasik (1994); Stein,
Leinhardt, and Bickel (1989); Wasik and Slavin (1994); Wheelock and Dorman (1988)

2.5.2 Administrators and Teachers Work to Achieve Equity in Learning Opportunities and Outcomes.

Administrators and teachers:
a. Make equitable distribution of achievement and other student outcomes a clearly stated
and vigorously pursued school goal.
b. Disaggregate achievement and behavioral data (by race, gender, socioeconomic level, etc.) to achieve clear understanding of how students of different groups are performing.
c. Gather information on ways to meet the needs of underserved groups.
d. Implement practices identified by research as promoting the achievement of high-needs
groups (cited throughout this document).

Allen and Tadlock (1987); Arcia and Gallagher (1992); Baker (1992); Dreeben (1987); Epstein and Maclver (1992); Lee and Smith
(1993); Marchant (1990); Martin-McCormick, et al. (1985); Moore (1988); Murphy and Hallinger (1989); Polanen (1991); Rumberger
and Douglas (1992)

2.5.4 Administrators and Teachers Provide Multicultural Education Activities as an Integral Part of School Life.

Administrators and teachers:
a. Integrate multicultural activities fully into the school curriculum, rather than restricting
them to one-shot or culture-of-the-month sessions.
b. Involve all students in multicultural activities, not just those students belonging to
minority cultural groups.
c. Make multicultural activities a norm from the beginning of children's school experience.
d. Communicate respect for cultural plurality by recognizing and responding to culturally
based differences in learning style.
e. Access and use the training and materials needed to deliver high-quality multi-cultural
education activities; administrators provide ongoing support.

Byrnes and Kiger (1987); Campbell and Farrell (1985); Cotton (1993b); Darder and Upshur (1992); Garcia, J., Powell, and Sanchez
(1990); Gimstad and Dechiara (1982); Gottfredson, Nettles, and McHugh (1992); Grant, Sleeter, and Anderson (1986); Hart and
Lumsden (1989); Levine and Lezotte (1990); Lomotey (1989); Merrick (1988); Pate (1981, 1988); Pine and Hilliard (1990); Rich (1987);
Swisher (1990); Valverde (1988)

2.5.5 Administrators and Teachers Provide Challenging Academic Content and English Language Skills for Language Minority Students.

Administrators and teachers:
a. Offer language minority students a strong academic core program, like that provided for other students.
b. Identify and review promising practices for language-minority students.
c. Conduct assessment of English and native language proficiency as students enroll in the school and periodically thereafter.
d. Provide non-English-speaking (NES) students intensive English-as-a-Second Language instruction.
e. Provide NES students instruction in their native languages for their core classes whenever possible. If this is not feasible, they provide native-language materials and, where possible, tutoring in their native languages.
f. Provide limited-English-proficient (LEP) students a combination of instruction in their native languages and instruction in English.
g. Engage volunteer tutors to help students to acquire English language literacy.
h. Group students heterogeneously by ability and language so that they can learn from one another.


2.6 ASSESSMENT

2.6.1 Administrators and Other Building Leaders Monitor Student Learning Progress Closely.

Administrators and teachers:

a. Engage in professional development activities to build assessment skills and evaluate the quality of assessment methods and data.
b. Collect and review performance data to ensure early identification and treatment of young children with learning difficulties.
c. Review test results, grade reports, attendance records, and other materials to spot potential problems, and make changes in instructional programs and school procedures to meet identified needs.
d. Review assessment instruments and methods for cultural, gender, or other bias and make changes as needed.
e. Make summaries of student performance available to all staff, who then assist in developing action alternatives. They also make periodic reports to parents and community members.
f. Coordinate assessment activities so that district, school, and classroom efforts work together and duplication of effort is minimized. They review assessment methods to ensure alignment with curriculum and instruction.
g. Establish and use procedures for collecting, summarizing, and reporting student achievement information. They establish and periodically update individual student records and use them to make group summaries and review them for trends.
h. Include assessment of school climate as part of assessment of student performance.
i. Use data from periodic assessment reviews when conducting curriculum reviews.

2.6.2 Administrators and Other Building Leaders Develop and Use Alternative Assessments.

Administrators and other leaders:

a. Engage schoolwide and community support for increased use of alternative assessments.
b. Ensure that alternative assessments align with curriculum and instruction.
c. Encourage teachers to incorporate alternative assessment practices in their classrooms.
d. Arrange for staff development activities to build alternative assessment skills, such as developing rubrics, establishing standards, designing performance tasks, and managing portfolio assessments.
e. Work with staff to systematize methods for collecting and reporting information produced by alternative assessments.
f. Collect and make available alternative assessment resources developed and used in other settings.

Baker (1992); Belk and Calais (1993); Calfee and Perfumo (1992); Costa and Kallick (1992); Haas (1990); Herman (1992); Hodges (1992); McMullen (1993); Newell (1992); Rafferty (1993); Shavelson and Baxter (1992); Shepard (1989); Telese (1993); Wiggins (1992)

2.7 SPECIAL PROGRAMS

2.7.1 Administrators and Teachers Identify Dropout-Prone Students and Implement Activities to Keep Them in School.

Administrators and teachers:

a. Explore the possibility of housing dropout-prevention services in settings outside of schools.
b. Implement flexible programming and scheduling to accommodate students who are parents or who work during school hours.
c. Implement or establish links with programs to help dropout-prone students with school-to-work transitions.
d. Form partnerships with businesses in the community and promote community-based learning.
e. Secure input from dropout-prone students for designing dropout prevention/reduction activities.
f. Provide students with learning activities that have real-world applications.


2.7.2 Administrators and Teachers Use Validated Practices for Tobacco, Alcohol, and Drug Prevention.

Administrators and teachers:

a. Begin prevention activities with students in the primary grades and continue them through high school. Programs for young children focus on positive self-regard and making healthy choices; those for older children include drug-specific activities.
b. Provide activities that move beyond giving information to influencing attitudes and behavior.
c. Use multiple strategies, including provision of accurate drug-related information in
combination with training in general life skills, "refusal skills," understanding and resisting media pressure, and positive alternatives to drug use.

d. Incorporate at least some peer-led activities into prevention programs.

e. Provide periodic "booster" sessions after initial instruction, recapping major points and offering opportunity for discussion and role-playing.

f. Target some prevention activities to specific, high-risk groups—inner-city youth, girls, gay and lesbian youth, and emotionally disturbed and learning disabled students.

g. Focus more on short-term, personally meaningful consequences of substance use—bad breath from smoking, loss of driver's license, etc.—than on long-term health risks.

h. Know that "scare tactics" do not work and avoid using them.

i. Set and enforce clear policies regarding drug possession, use, or sale.

j. Provide aftercare support for students who have received alcohol or drug treatment or are involved in smoking cessation.

k. Enlist the support of parents and community members in designing and reinforcing the school's prevention program.

l. Collaborate with community agencies and volunteers to provide drug-free athletic and other activities for students.


2.7.3 School Leaders and Staff Collaborate with Community Agencies to Support Families with Urgent Health and/or Social Service Needs.

School leaders and staff:

a. Learn about the array of medical and social service providers in the community and how to access them.

b. Learn about models for school-community collaboration for needy families that have been implemented in other settings.

c. Work with health and social service agencies to coordinate the delivery of services to children and families. Whether or not the school is the entry point for families to seek services is a matter of local preference.

d. Assist needy families to access appropriate health and social service facilities and providers in the community.

e. Identify needy children and families early in the children's school experience and work with community agencies on prevention and intervention activities.

f. Engage in true collaboration with community agencies by, for example, providing office space for a social service provider whose salary is paid by an external agency.

Ascher (1988, 1990); Bain and Herman (1989); Cohen, D. L. (1989); Comer (1986, 1988); Cotton (1992c); Cuban (1989); Fillmore and Valadez (1986); Gersky (1990); Guthrie and Guthrie (1991); Hodgkinson (1991); Madden, et al. (1993); McCurdy (1990); McPartland and Slavin (1990); Oakes (1987); Pollard (1990a,b,c); Sylvester (1990)

2.8 PARENT AND COMMUNITY INVOLVEMENT

2.8.1 Administrators and Teachers Involve Parents and Community Members in Supporting the Instructional Program.

Administrators and teachers:
a. Communicate repeatedly to parents that their involvement can greatly enhance their children's school performance, regardless of their own level of education.
b. Offer parents several different options for their involvement, e.g., tutoring their children at home, assisting in classrooms, participating in parent-teacher conferences, etc.
c. Strongly encourage parents to become involved in activities that support the instructional program.
d. Provide parents with information and techniques for helping students learn (e.g., training sessions, handbooks, make-and-take workshops, etc.).
e. Establish and maintain regular, frequent home-school communications. This includes providing parents with information about student progress and calling attention to any areas of difficulty.
f. Involve community members in schoolwide and classroom activities, giving presentations, serving as information resources, functioning as the audience for students' published writings, etc.

Armor, et al. (1976); Becher (1984); Block (1983); Brookover (1979); Cotton (1991b); Cotton and Wikelund (1989); Griswold, Cotton, and Hanser (1986); Gursky (1990); Hasley, et al. (1984); Henderson (1987); Levine and Stark (1981, 1982); Saties (1985); Stevens (1985); Tangri and Moles (1987); Walberg, Boie, and Waxman (1980); Watson, Brown, and Swick (1983)

2.8.2 Administrators and Teachers Involve Parents and Community Members in School Governance.

Administrators and teachers:

a. Develop written policies which legitimize the importance of parent involvement and provide ongoing support to parent involvement efforts.
b. Communicate clearly to parents the procedures for involvement and use the procedures consistently.
c. Engage parent and community participation on school-based management teams.
d. Conduct vigorous outreach activities especially in culturally diverse school settings to involve parent and community representatives from all cultural groups in the community.
e. Make special efforts to involve the parents of disadvantaged, racial minority, and language minority students, who are often underrepresented among parents involved in the schools.
f. Work with cultural minority parents and community members to help children cope with any differences in norms noted between the home and the school.
g. Involve parents and community members in decision making regarding school governance and school improvement efforts.
h. Monitor and evaluate parent/community involvement activities and continually work to keep participation effective.
i. Publish indicators of school quality and provide them to parents and community members periodically to foster communication and stimulate public action.
j. Involve business, industry, and labor in helping to identify important learning outcomes and in providing opportunities to apply school learnings in workplace settings.

Baecher, Cicchelli, and Baratta (1989); Becher (1984); Boyd (1992); Cotton and Wikelund (1990); David (1989); Glaser, et al. (1992); Grobe (1993); McCarthy and Still (1993); Murphy (1988); New York SDE (1974); Pavan and Reid (1994); Sammons, Hillman, and Mortimore (1994); Stiles (1994); Stiller and Ryan (1992); Wang, Haertel, and Walberg (1993-1994); Williams and Chavkin (1989); Wilson, B. L., and Corcoran (1988)

3. DISTRICT CHARACTERISTICS AND PRACTICES
The district supports and monitors efforts toward improved student learning, delegating much of the responsibility for operations to the individual schools. Leadership and training in curriculum, instruction and assessment, together with positive district-school interactions, create a climate conducive to successful teaching and learning.

3.1 LEADERSHIP AND PLANNING

3.1.1 District Leaders and Staff Hold and Communicate High Expectations for the Entire School System.

District leaders and staff:

a. Believe that all students can learn and that district educators have considerable influence on the level of student success. They communicate to all constituents that learning is the most important purpose of schooling.

b. Establish and protect goals and priorities for improvement. They make goals and priorities highly visible throughout the school community, particularly through efforts of the superintendent. Goals focus on improving student performance.

c. Work with one another and with school personnel for the benefit of students; they review all proposals for action in terms of their potential effect on students.

d. Establish plans and activities that focus on improving instructional effectiveness, and communicate the expectation that instructional programs will be improved over time.

e. Review recruitment, selection, and promotion policies periodically to assure that creative, innovative building administrators are hired and retained.

f. Make use of proven practices to recruit and retain excellent teachers, including teacher mentoring, rich inservice opportunities, and hiring members of cultural minorities, particularly in culturally diverse settings.

g. Establish and maintain good communication with the school board regarding progress on school improvement plans.

Boone (1992); Corbett and Wilson (1992); Everson, et al. (1986); Hallinger and Hausman (1993); Hallinger, Bickman, and Davis (1989); Levine (1990); Levine and Lezotte (1990); Lomotey (1989); Louis and Miles (1989); Miller, Sney-Richman, and Woods-Houston (1987); Murphy and Hallinger (1986, 1988); Odell and Ferraro (1992); Pajak and Glickman (1987); Pine and Hilliard (1990); Purkey and Smith (1983); Schlechty (1985); Wilson, B. L., and Corcoran (1988)

3.1.2 District Leaders and Staff Establish Policies and Procedures that Support Excellence and Equity in Student Performance.

District leaders and staff:

a. Hold and communicate the conviction that all children can be successful learners; those in culturally diverse districts regard their diversity as a strength.

b. Review district policies periodically to determine the effect they have on student performance. They strengthen policies as needed to increase support for specific district goals and for improving student performance and equity.

c. Establish policies and procedures that focus on improving student performance and require ongoing improvement efforts at every level in the district. They establish guidelines that provide a framework for action, rather than mandating specific steps.

d. Establish policies which foster the development of clear goals in each school building and work with school staffs to translate these into measurable results.

e. Encourage and support school-based management. They share decision making regarding budget, staffing, and curriculum with school leaders.
f. Require schools to generate action plans for improvement and carry them out. District administrators communicate the expectation that building principals serve as instructional leaders.
g. Establish and enforce expectations for participation in improvement efforts; building administrators are included in district planning activities.
h. Review regulations and requirements governing construction, remodeling and maintenance of school facilities to ensure that optimal physical environments are provided for teaching and learning.
i. Use their knowledge of research to guide policy development and school monitoring. They avoid (or discontinue) the use of district or school practices that conflict with the findings of well-designed research.

Biester, et al. (1983); David (1989); Dentler (1994); Evers, et al. (1986); Fullan (1993); Jackson and Crawford (1991); Jacobson (1988); Levine (1990); Levine and Levine (1990); Libler (1992); Murphy, et al. (1987); Paredes and Frazer (1992); Peterson, Murphy, and Hallinger (1987); Purkey and Smith (1983); Schlechty (1985); Wilson and Corcoran (1988); Wohlstetter, Snyder, and Mohrman (1994)

3.2 CURRICULUM

3.3 DISTRICT-SCHOOL INTERACTIONS

3.3.1 District Leaders and Staff Delegate Considerable Decision-Making Authority to Schools.

District leaders and staff:
a. Work with schools to establish broadly representative school-based management teams that draw their membership from administrators, teachers, students, non-certified staff, parents, and community members.
b. Make themselves available to provide training, research-based information, and on-site assistance to help schools to implement school-based management.
c. Provide clear guidelines to school teams about their role and the extent of their authority, information about school operations and budgets, and skills training in group processes such as decision making and conflict resolution.
d. Provide resources, such as time and financial support for planning and carrying out team activities.
e. Ensure that team members have genuine decision-making power.
f. Increase schools' latitude for decision making through helping them to have state and local regulations waived as appropriate.
g. Involve teacher union representatives in discussions of school-based management, which increases their willingness to be flexible about contract constraints.
h. Assist schools to evaluate and modify their school-based management structures based on continuous review of program activities and their effects.

Arterbury and Hord (1991); Caldwell and Wood (1988); Ceperley (1991); David (1989); David and Peterson (1984); Davidson, B. M. (1993); Duttewiler (1990); English (1989); Fullan (1993); Hall (1992); Henderson and Marburger (1990); Hord (1992b); Levine and Eubanks (1989); Lewis (1989); Libler (1992); Malen and Ogawa (1988); Malen, Ogawa, and Kranz (1990a,b); Mojkowski and Fleming (1988); Murphy and Hallinger (1993); Mutcher (1989); Odden and Wohlstetter (1995); White, P. A. (1989)

3.3.2 District Leaders and Staff Encourage, Support, and Monitor School Improvement Efforts.

District leaders and staff:
a. 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.
b. 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.
c. Monitor implementation of policies and procedures in individual schools, providing
advice, clarifications, technical feedback, and support services. They pay particular
attention to the progress of improvement efforts.
d. Assist local schools in their improvement efforts by providing consultation, materials
development, and training assistance as requested by building personnel.
e. Establish a resource pool for building-level improvement projects. Departmental budgets
include resource items specifically related to the attainment of district goals and priorities.
f. Provide principals and school staffs ongoing programs of staff development focused on
strengthening instructional leadership skills, and strongly encourage them to pursue other
professional development activities.
g. Protect schools from political or economic turbulence which might disrupt classroom
instruction.

Berman and McLaughlin (1979); Biester, et al. (1984); Boone (1992); Corbett and Wilson (1992); David (1989); Everson, et al. (1986);
Gersten, Carnine, and Zuref (1986); Hord (1992); Hord, C. A. and Hallinger (1988); Levine and Leontke (1990); Levine and Stark (1982); Louis and Miles (1989); Miller, R., et al. (1987); Murphy, et al. (1987);
Murphy and Hallinger (1993); Pajak and Glickman (1987); Peterson, Murphy, and Hallinger (1987); Purkey and Smith (1983); Schlechtly
(1985); Stringfield (1995); Wilson and Corcoran (1988)

3.3.3 District Leaders Recognize and Reward Excellence.

District leaders:
a. Use clear, negotiated criteria for supervision and evaluation of building administrators.
Superintendents personally supervise and evaluate principals whenever possible.
b. Establish award programs for schools, administrators, teachers and students and take a
visible role in recognizing excellence. District award programs complement school award
programs.
c. Base awards on contributions staff have made to improving student performance. They
use agreed-upon criteria for determining award recipients, rather than comparison to peers.
d. Make certain that district monitoring of school operations and improvement efforts is
accompanied by recognition of successes.

David (1989); Everson, et al. (1986); Louis and Miles (1989); Miller, R., et al. (1987); Murphy and Hallinger (1988); Murphy and Peterson
(1985); Murphy, et al. (1987); Odell and Ferraro (1992); Wilson, B. L., and Corcoran (1988)

3.3.4 District Leaders Assist Schools to Carry Out Prevention Activities and to Support High-
Needs Students and Families to Access Needed Services.

District leaders:
a. Work with schools to develop and implement firm discipline policies.
b. Help school staff to create positive climates that can help reduce the incidence of illegal
and/or disruptive behavior.
c. Arrange training for school staff in developing and implementing prevention programs
for dropout, pregnancy, drugs, gangs, and violence.
d. Stand behind schools as they enforce policies regarding illegal and/or disruptive
activities.
e. Assist schools in identifying and building linkages with social service and health agencies
to support high-needs students and their families.
f. Help schools to identify appropriate placements for students who are not able to function well in the regular school environment, e.g., school-within-a-school.


3.4 ASSESSMENT

3.4.1 District Leaders and Staff Monitor Student Progress Regularly.

District leaders and staff:
  a. Collect and summarize information about student performance on a regular basis, identify areas of strength and weakness, and prepare and share reports throughout and community, giving special emphasis to priority goals and objectives.
  b. Coordinate assessment efforts to ensure quality, avoid duplication of effort, and minimize disruption of classroom instruction.
  c. Check alignment among tests, curriculum, and instruction regularly and work with schools to improve it.
  d. Conduct district-level assessments, with major tests announced well in advance to facilitate building and classroom scheduling. They establish and use specific routines for scoring, storing, reporting, and analyzing results, and report results quickly.
  e. Use assessment results to evaluate programs and target areas for improvement.
  f. Provide direct support for building- and classroom-level assessment efforts.

Behr and Bachelor (1981); Everson, et al. (1986); Hord (1992); Hord and Huling-Austin (1986); Levine and Lezotte (1990); Levine and Stark (1982); Murphy and Hallinger (1986, 1988); Murphy, et al. (1987); Pajak and Glickman (1987)

3.4.2 District Leaders and Staff Support Schools' Development and Use of Alternative Assessments.

District leaders and staff:
  a. Make district support of alternative assessment practices known throughout the district and its community.
  b. Provide staff development for building skills needed for designing, administering, and scoring alternative assessments.
  c. Develop and maintain a districtwide "tool kit" of exemplary tasks, task templates, and design criteria for tasks.

Baker (1992); Belk and Calais (1993); Wiggins (1992)

Effective Schooling Research Bibliography

Introduction

Literature related to effective schooling has been gathered together in this bibliography. Research reports, syntheses, meta-analyses, reviews, and analytical commentaries are included. References listed
in the preceding section, plus many others, can be found here in full bibliographic form.

For those who wish to delve more deeply into topics addressed in the preceding pages, but do not have time to read every document cited in the bibliography, we have identified an array of high-quality summaries and reviews. These are marked with an asterisk (*).

Finally, we need to remind readers that this bibliography is not comprehensive. While we believe that the core of the literature is well represented, some studies not cited here may well be important in furthering the understanding of educational effectiveness.

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Footnotes

1. Effective practices for assisting dropout-prone students are much the same as those for supporting any high-needs student. The functions listed in this section are those additional practices with particular relevance to reducing the incidence of dropping out at the secondary level.

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