This book describes research-based characteristics and practices that have been identified as leading to improvements in student performance. It is an expanded version of a research summary, first published in 1984, and is supported by more than 1,400 research studies. It was originally developed for use in schools receiving training in the Onward to Excellence school-improvement process. The findings are arranged under eight major topic areas: (1) leadership, planning, and learning goals; (2) management and organization; (3) instruction and instructional improvement; (4) interactions; (5) equity; (6) special programs; (7) assessment; and (8) parent and community involvement. Each topic area is subdivided into three levels: classroom, school, and district. Within each level are several practice clusters, with titles such as "Teachers Use a Preplanned Curriculum to Guide Instruction," that apply to that level and that are supported by research. The key research reports that support those practices are listed at the end of each cluster. The research cited here has examined a number of different approaches to school effectiveness, including school-effects research, teacher-effects research, research on instructional leadership, curriculum-alignment and curriculum-integration research, program-coupling research, and research on educational change. A large bibliography contains full citations for the works cited. (Contains approximately 1,330 references.) (RJM)
Research You Can Use To Improve Results
Research You Can Use To Improve Results

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Association for Supervision and Curriculum Development
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Kathleen Cotton
Introduction

Background

While this is the first time that the Association for Supervision and Curriculum Development (ASCD) has published this resource, it is actually an expanded version of a research summary first published by the Northwest Regional Educational Laboratory (NWREL) in 1984 and updated in 1990 and 1995. This edition includes findings from research on several topics not previously reviewed, along with bibliographic support for these findings. The result is that the findings presented here are supported by more than 1,400 of the highest quality and most useful studies and summaries available.

The findings are arranged within eight major topic areas:
1. Leadership, Planning, and Learning Goals
2. Management and Organization
3. Instruction and Instructional Improvement
4. Interactions
5. Equity
6. Special Programs
7. Assessment
8. Parent and Community Involvement

Within each of these general topic areas are listed the classroom, school, and district practices that research has shown to foster positive student achievement, attitudes, and social behavior. See the section, “How to Use this Resource” (p. 2), for more detail on this organizational strategy.

The original 1984 edition featured findings from the now-classic “school effectiveness” research conducted in the 1970s and early 1980s. That research studied effective and ineffective schools with similar student populations and identified key differences in their organization, management, curriculum, and instruction. The 1990 and 1995 updates retained the findings from the 1984 publication, adding refinements to them and including research findings on many more topics.

This resource was initially developed for use in schools receiving training in NWREL’s Onward to Excellence (OTE) school improvement process. Staff of these schools—now numbering more than 2,000 across the U.S.—have used the earlier versions of this publication to identify research-based practices that relate to the improvement goals they have set. School staff 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 one of the nation’s best known and most highly regarded approaches to school improvement. Its success is due largely to (1) its insistence that educational improvement efforts be research based and (2) its provision of a resource—this publication and its predecessors—that makes it feasible for busy school personnel to access and benefit from research. Participants in NWREL’s more recently developed Onward to Excellence II process are also making extensive use of this resource.

The widespread, successful use of this publication in OTE and OTE II schools is very gratifying. Its use, however, has expanded considerably beyond this application: The combined dissemination of the first three editions totals more than 200,000 copies.

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1The first three editions of this resource were titled Effective Schooling Practices: A Research Synthesis, with the two updates so designated, e.g., 1995 Update.
The Effective Schooling Research
The evidence that supports the assertions made in this resource comes 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

Taken as a whole, the findings from research in these areas provide a broad and integrated picture of effective schooling practices. However, while the research in some areas (such as teacher effects) is plentiful, of high quality, and quite consistent, the research base in other areas (such as curriculum integration) is smaller and more difficult to link to particular student outcomes. Consequently, the assertions about effective schooling made in this book cannot be entirely conclusive. Still, the evidence in support of these assertions is strong and continues to become stronger as contemporary researchers add to and confirm the findings of earlier research.

How to Use This Resource
This book describes characteristics and practices identified by research as associated with improvements in student performance. Findings are cited within eight general topic areas, each of which is subdivided into three levels—classroom, school, and district. Within each level are several practice clusters (such as “Teachers Use a Preplanned Curriculum to Guide Instruction”) that apply to that level. Each cluster is made up of research-based practices (e.g., “Teachers establish timelines for unit or lesson objectives so they can use the calendar for instructional planning”). At the end of each cluster is a listing of the key research reports that support those practices. Full citations for those reports 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. They can stimulate discussion of instructional issues, guide the development of appropriate local improvements, and aid in decisionmaking 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 resource 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, OTE II 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, school staff members, parents, community members, and students themselves can work together to improve schooling practices and student results.

It is suggested that readers review the research findings reported here and, based on local decisions and needs, use these findings to develop processes that can lead to attainment of school goals.

How to Access the Research

Use of this resource will lead some readers to want to acquire materials identified in the bibliography, and it should be relatively easy to do so. The bibliography provides the most complete information possible for each source cited, including journal volumes, numbers, months (or seasons) and years. ED numbers are provided for documents available through the Educational Resources Information Center (ERIC) system, and most hard-to-find or “fugitive” items have been excluded. Finally, those items cited at the end of each practice cluster in the text have been selected partly for ease of access, and most can readily be retrieved at a municipal, 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 these resources.

ERIC Documents. Citations that conclude with an ED number—the letters “ED” followed by six digits—in parentheses, refer to materials that have been photocopied and miniaturized on microfiche cards 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, DynEDRS, Inc., 7420 Fullerton Road, Suite 110, Springfield, VA 22153-2852, 1-800-443-ERIC. Costs: Paper copy—$4.21 for each 25 pages or part thereof; microfiche—$1.42 for 1-480 pages; $.25 for each additional 96 pages or part thereof; plus shipping and handling.

NWREL Materials. Some citations in this bibliography refer to materials developed at NWREL. These are generally available for purchase from NWREL’s Document Reproduction Service, and many of them are also in the ERIC system. Finally, most of these materials are available on NWREL’s Web site and can be found at <www.nwrel.org/scpd/sirs/>.

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1 Document Reproduction Service, Northwest Regional Educational Laboratory, 101 SW Main Street, Suite 500, Portland, OR 97204, (503) 275-9519. Fax purchase orders to (503) 275-0458.
Further Information
NWREL's School Improvement Program (SIP) has developed the Onward to Excellence II process referenced above for use by local schools in applying effective schooling research results to meet school improvement goals. For further information about OTE II or other School Improvement Program services, contact:

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Leadership, Planning, and Learning Goals
1.1 Classroom

1.1.1 Teachers Emphasize the Importance of Learning

Teachers:

a. Communicate to students that learning is the most important purpose of being in school.

b. Reinforce to students that the things they are learning will be useful throughout their lives, giving examples of current and future applications.

c. Make clear that the reason for classroom routines and behavior policies is to allow learning activities to proceed smoothly.

d. Model enthusiasm for learning; they communicate through their words and actions that learning is fun.

e. Tell students about their own reading/studying and what they are learning.

f. Take action to minimize things within or outside the classroom that interfere with learning.

Key references  Agne, Greenwood, and Miller (1994); Bain, Lintz, and Word (1989); Bettencourt, et al. (1983); Brigham (1991); Brophy (1988b); Chiodo and Lobaugh (1995); Cotton (1989b, 1990b); Doyle (1986); Fisher, et al. (1980); Good (1987); Good and Brophy (1986); Leinhardt, Weidman, and Hammond (1987); Levine and Lezotte (1995); Manning (1989-90); Martens and Kelly (1993); Streeter (1986); Williamson (1991); Zigarelli (1996)

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

Teachers:

a. Use thematic units as the organizing principle 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.

Key references

Aschbacher (1991); Brophy and Alleman (1991); Burns and Sattes (1995); Epstein (1996); Friend (1985); Greene (1991); Grisham (1995); Henderson and Landesman (1992); Hough (1994); Hough and St. Clair (1995); Ladewig (1987); Lake (1994); Lee and Smith (1993); LeVitan (1991); Maclver (1990); Mansfield (1989); Martinez (1992); Meckler (1992); Pressley, et al. (1997); Schumacher (1995); Smith, Johnson, and Rhodes (1993); Vars (1987); Vye (1990); Willett (1992); Williams (1991)

1.1.4 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 decisionmaking 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.

Key references

Aschbacher (1991); Brophy and Bachelor (1981); Branch (1994); Brophy and Good (1986); Byra and Coulon (1994); Callaway (1988); Denham and Lieberman (1980); Earle (1992, 1996); Edmonds (1979a,b); Glatthorn (1993); Kallison (1986); Leithwood and Montgomery (1980, 1985); Mortimore, et al. (1988); Mortimore and Sammons (1987); Reiser (1994); Rosenshine (1976, 1983); Rosenshine and Stevens (1986); Sammons, Hillman, and Mortimore (1995); Sarason (1971); Shann (1990); Stallings (1985a, 1986); Venezky and Winfield (1979)
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.

Key references


1.5 Teachers Provide Instruction and Practice in Citizenship Skills

Teachers:

a. Provide age-appropriate instruction in the nation’s founding ideals and documents, legal principles, current events, and citizenship issues of personal relevance to students.

b. Exhibit democratic leadership, encouraging students to express and defend their views on significant issues.

c. Engage students in active, hands-on learning projects to apply the principles of democracy they are learning.

d. Provide instruction and practice in communication, conflict management, consensus building, thinking, and collaboration skills.

e. Supplement the use of textbooks with original source materials, both historical and contemporary, and with presentations by knowledgeable resource people.

f. Implement for secondary students law-related education curricula focusing on various aspects of the law and legal principles such as justice, equality, authority, freedom, and order.
1.1.6 Teachers Use Educational Technology for Instructional Support and Workplace Simulation

Teachers:

a. Receive training to enable them to use educational technology effectively.
b. Communicate enthusiasm to students about using educational technology to enhance learning and build computer and other technological skills.
c. Use computer-assisted instruction and other technology to supplement—not replace—traditional, teacher-directed instruction.
d. Provide activities that simulate workplace uses of computers and other technology to build employability skills for all students.
e. Make use of computers and word processing software to foster the development of writing skills.
f. Select software that provides students immediate feedback on the accuracy of their responses and points to the problems underlying students’ errors.
g. Provide high-interest drill-and-practice programs to support learning, especially with students requiring skill remediation.
h. Assure technology access and experiences of success for all students, including those who often have less access, e.g., female, minority, ESL, learning disabled, deaf/hearing impaired, and low-SES students.
i. Provide learning activities involving the use of educational technology to engage the interest of chronically misbehaving students and students with negative attitudes toward traditional learning methods.
j. Enhance lessons with integrated video media, CD-ROM technology, Internet research, and other technology.
k. Use hypertext/hypermedia-based learning accompanied by scaffolding that gradually reduces students’ dependence on instructors for technical assistance.
1.1.7 Teachers Help Students Prepare to Become Lifelong Learners

Teachers:

a. Emphasize to students that they will need to be lifelong learners in order to succeed in the workplace, be competent citizens, and respond effectively to the “information explosion.”

b. Recognize and communicate to students that lifelong learning requires a positive attitude toward learning, together with an array of interrelated skills: communication skills, self-directed learning skills, research and library skills, study skills and learning strategies, higher-order thinking skills, and metacognitive skills.

c. Remind students, when providing instruction in any of these areas, that this preparation for lifelong learning will help insure their future success.

d. Foster learning motivation in preschool and kindergarten children by engaging them in play, exploration, and socialization activities rather than introducing them to formal academic work.

e. Focus the attention of older children on learning rather than competing, and allow them to select some of their own learning activities.

f. Provide, for students of all ages, language-rich environments with many kinds of reading materials, in-class time for reading, student discussion of readings, and writing activities featuring a process approach.

g. Encourage self-directed learning by teaching students how to lay out tasks and timelines and by acting as facilitators and coaches as older students pursue learning projects.

h. Teach students study skills and learning strategies, and provide instruction and practice in metacognition and other higher-order thinking skills. (See section 3.1.5.)

i. Help each student to recognize his or her dominant learning style(s) and to expand his or her ability to learn in different ways.

Ideally, students would gain the skills for lifelong learning during the course of any high-quality educational program. This section identifies practices that are given special emphasis by researchers in the area of lifelong learning.
1.2 School

1.2.1 Everyone in the School Community Emphasizes the Importance of Learning

Administrators and teachers:

a. Have high expectations for student achievement; all students are expected to work hard to attain priority learning goals.

b. Continually express expectations for improvement of the instructional program.

c. Emphasize academic achievement when setting goals and school policies.

d. Develop mission statements, slogans, mottoes, and displays that underscore the school’s academic goals.

e. Focus on student learning considerations as the most important criteria for making decisions.

Key references

Andrews and Soder (1987); Armor, et al. (1976); Austin and Holowenzak (1985); Bamburg (1994); Bamburg and Andrews (1987, 1991); Beck and Murphy (1996); Berliner (1979); Brookover and Lezotte (1979); Edmonds (1979a); Edmonds and Frederiksen (1979); Fullan (1993); Good (1987); Good and Brophy (1986); Hallinger and Heck (1996); Hoy, Tarter, and Bliss (1990); Keedy (1992); Larsen (1987); Levine (1990); Levine and Lezotte (1995); Lezotte and Bancroft (1985); Little (1982); Madden, Lawson, and Sweet (1976); Murphy and Hallinger (1988); Paredes and Frazer (1992); Pavan and Reid (1994); Peng (1987); Purkey and Smith (1983); Rosenholtz (1985, 1989a,b); Rutter, et al. (1979); Sammons, Hillman, and Mortimore (1995); Shan (1990); Snyder (1995); Wang, Haertel, and Walberg (1993-94); Weber (1971); Weinstein, Madison, and Kuklinski (1995); Wilson and Corcoran (1988); Zigarelli (1996)
1.2.2 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 decisionmaking, 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 and with assessments of student learning.

Key references

Behr and Bachelor (1981); Berliner (1985); Block (1983); Bossert (1985); Cohen (1994); Corcoran (1985); Deal and Peterson (1993); DeBevoise (1984); Edmonds (1979a); Engman (1989); Everson, et al. (1986); Good and Brophy (1986); Griswold, Cotton, and Hansen (1986); Hallinger and Heck (1996); Hawley, et al. (1984); Hord (1992a); Larsen (1987); Leithwood and Montgomery (1982, 1985); Levine and Lezotte (1990); Lezotte and Bancroft (1985); Peng (1987); Rosenholtz (1985, 1989a,b); Sammons, Hillman, and Mortimore (1995); Sarason (1971); Schau and Scott (1984); Scott (1984); Stevens (1985); Venezky and Winfield (1979); Vincenzi and Ayrer (1985)

1.2.3 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.
1.2.4 Administrators and Teachers Include Workplace Preparation Among School Goals

Administrators and teachers:

- Recognize the importance of developing employability skills in all students, regardless of their postsecondary plans.
- Include age-appropriate activities to develop workplace readiness skills at all levels, K-12.
- Ensure that students develop the higher-order skills in demand in the modern workplace—problem-solving and decisionmaking skills, learning strategies, and creative thinking.
- Give special emphasis to the development of qualities required for workplace success—dependability, positive attitude toward work, conscientiousness, cooperation, adaptability, and self-discipline.
- Provide, for secondary students, learning environments that replicate key features of real work settings.
- Give older students tasks which approximate those performed by people in real work settings.
- Ensure that teachers have considerable autonomy in establishing learning activities, classroom design, and instructional approaches.
- Assist secondary students in preparing and updating their written career plans to identify their future educational and occupational directions.
- Help students to reflect on their school- and community-based learning experiences.

Key references


1.2.5 Administrators and Teachers Support the Development of Students' Citizenship Skills

Administrators and teachers:

a. Share school leadership, with principals granting teachers considerable autonomy to model democratic organizational structure.

b. Allow student participation in decisionmaking about school and classroom issues that affect them.

c. Make a priority of citizenship education for students at all levels.

d. Work with students to carry out projects that reinforce academic skills in the context of developing citizenship skills.

e. Provide opportunities for older students to pursue community service projects that help students to focus on the public good, practice civic skills, and contribute to the community.

f. Provide opportunities for students to participate in local, regional, and national programs designed to develop citizenship knowledge and skills, e.g., Mock Trial programs, We the People programs, and law-related education programs.

g. Engage in inservice activities to enhance their skills in establishing and operating schoolwide and classroom-level citizenship development programs.

Key references

Berman (1990); Beyer (1988); Boyer (1990); Cotton (1996); Dynneson (1992); Eveslage (1993); Farivar (1996); Fowler (1990); Hardin and Johnson (1991); Hepburn (1982); Hoge (1988); Mullins (1990); Pereira (1988); Rutter and Newmann (1989); Torney-Purta (1983); Wood (1990); Wright (1996)

1.2.6 Administrators Support the Use of Educational Technology

Administrators:

a. Allocate resources to equip computer laboratories with adequate hardware, software, and Internet connections.

b. Hire or train staff to provide students with learning activities involving the use of educational technology, e.g., computer programming, computer-assisted learning, Internet research, distance learning, and interactive video.

c. Arrange for ongoing staff development, encouragement, and support for teachers working with students in computer-related activities and other instructional technology.

d. Develop policies for Internet use in concert with other administrators and staff.

e. Work with teachers to assure that computer-assisted instruction and other educational technology is well integrated into the instructional program, rather than an "add-on."
f. Assure that female, minority, ESL, learning disabled, hearing impaired, and low-SES students have plenty of access to, instruction in, and support for learning activities involving the use of educational technology.

g. Prepare grant proposals to secure resources for educational technologies.

Key references

1.2.7 Administrators and Teachers Develop Schoolwide Policies and Practices to Prepare Students for Lifelong Learning

Administrators and teachers:

a. Recognize the need for today’s students to be lifelong learners and engage in such staff development as may be needed to help students build lifelong learning skills.

b. Reach agreement as a staff about learning skills terminology and approaches that will be used to teach and reinforce skills and strategies.

c. Communicate that they trust the ability and willingness of secondary students to take much of the responsibility for their own learning.

d. Develop policies and launch projects which support students’ participation in community-based learning activities.

e. Allocate resources to support the development of research and independent learning skills, e.g., computer hardware and software, community research opportunities.

Key references
Burak (1993); Caissy (1986); Cummings (1992); Daragan and Stevens (1996); Dickinson (1995); Hancock (1993); Hoff (1994); Knowles (1990); Komoski (1994); Lieberman and Linn (1991); National Center for Research in Vocational Education (1995); Owens and Wang (1996); Smith, et al. (1990); Thomas, Strage, and Curley (1988); Van Der Zee (1991)

1.3 District

1.3.1 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 with the ability to facilitate and manage change 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 minority groups, particularly in culturally diverse settings.

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

Key references

Ackley and Gall (1992); Boone (1992); Corbett and Wilson (1992); Education Commission of the States (1995); Everson, et al. (1986); George, Grissom, and Just (1996); Hallinger, Bickman, and Davis (1989, 1996); Hallinger and Hausman (1993); Levine (1990); Levine and Lezotte (1990); Lomotey (1989); Louis and Miles (1990); Miller, Smey-Richman, and Woods-Houston (1987); Murphy and Hallinger (1986, 1988); Newmann, King, and Rigdon (1997); Odell and Ferraro (1992); Pajak and Glickman (1987); Pine and Hilliard (1990); Purkey and Smith (1983); Schlechty (1985); Weinstein, Madison, and Kuklinski (1995); Wilson and Corcoran (1988); Wohlstetter and Mohrman (1996)

1.3.2 District Leaders and Staff Conduct Careful Curriculum Planning to Ensure Continuity

District leaders and staff:

a. Establish frameworks, guidelines, and quality standards to unify curriculum planning districtwide. They ensure that curriculum and instructional planning is consistent at the district, school, and classroom levels.

b. Work with schools to identify a limited number of priority objectives to clarify what students should learn. They sequence the objectives by grade level; review them for technical quality, specificity, and clarity; and target them for students by developmental level.

c. Identify learning materials, available space, and special facilities, staff, and other instructional resources and catalogue them by objective or goal area.

d. Match resources to learning objectives and student developmental levels and check them for accuracy and alignment. They also identify validated instructional strategies, especially for high-priority objectives.
e. Conduct districtwide curriculum alignment and review efforts to ensure high quality of instruction and consistency across schools.

f. Provide direct support for building and classroom curriculum efforts; superintendents, in particular, take an active role in collaborating with schools on curriculum and instruction.

g. Provide support for integration of traditional subject areas, including consultation assistance, planning time, resources, and training.

**Key references**

Aguilera and Hendricks (1996); Behr and Bachelor (1981); Bredeson (1996); Corbett and Wilson (1992); David (1989); Denham and Lieberman (1980); Everson, et al. (1986); Hord and Huling-Austin (1986); Miller, Smey-Richman, and Woods-Houston (1987); Murphy and Hallinger (1986, 1988); Odell and Ferraro (1992); Pajak and Glickman (1987); Valadez and Gregoire (1989); Wilson and Corcoran (1988)

1.3.3 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 and call for multicultural activities to be integrated into the curriculum.

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.

Key references
Aguilera and Hendricks (1996); Biester, et al. (1984); David (1989); Dentler (1994); Education Commission of the States (1995); Everson, et al. (1986); Fullan (1993); Jackson and Crawford (1991); Jacobson (1988); Levine (1990); Levine and Lezotte (1990); Libler (1992); Murphy, et al. (1987); Paredes and Frazer (1992); Peterson, Murphy, and Hallinger (1987); Purkey and Smith (1983); Schlechty (1985); Smith and Lee (1996); Vavrus, et al. (1996); Wilson and Corcoran (1988); Wohlstetter and Mohrman (1996); Wohlstetter, Smyer, and Mohrman (1994)
Management and Organization
2.1 Classroom

2.1.1 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.

Key references


2.1.2 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.

k. Engage in professional development activities that introduce them to strategies for efficient time use.

Key references
Anderson (1980, 1985); Berliner (1979); Bielefeldt (1990); Brookover and Lezotte (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); Helmke and Schrader (1988); Karweit (1984, 1985); Knorr (1981); Kulik and Kulik (1988); Levine and Lezotte (1990); Martens and Kelly (1993); McGarity and Butts (1984); Orchard (1996); Rosenshine (1978, 1979, 1983); Sammons, Hillman, and Mortimore (1995); Slavin (1994a); Stallings (1980); Strother (1985); Teddie, Kirby, and Stringfield (1989); Walberg (1988); Walberg, et al. (1985); Wang, Haertel, and Walberg (1993-94); Wyne and Stuck (1979)

2.1.3 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.

Key references
Allen (1986); Anderson, et al. (1980); Armor, et al. (1976); Bain, Lintz, and Word (1989); Bielefeldt (1990); Brophy (1979, 1983a, 1986a); Brophy and Good (1986); Brown, McIntyre, and McAlpine (1988); Doyle (1986); Edmonds (1979a); Emmer, Evertson, and Anderson (1980), Emmer, et al. (1980); Evertson (1982, 1985); Evertson and Harris (1992); Evertson, et al. (1983, 1985); Fenwick (1996); Gersten and Carnine (1986); Good and Brophy (1986); Hawkins, Doueck, and Lishner (1988); Hawley, et al. (1984); Kounin (1977); Leinhardt, Weidman, and Hammond (1987); Martens and Kelly (1993); Medley (1979); Rosenshine (1983); Rosenshine and Stevens (1986); Sanford, Emmer, and Clements (1983); Sanford and Evertson (1981); Wang, Haertel, and Walberg (1993-94)

2.1.4 Teachers Establish Clear Discipline Policies 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. Understand and apply culturally appropriate behavioral policies and sanctions in culturally diverse classrooms.
d. Provide written behavior standards and teach and review them from the beginning of the year or at the start of new courses.
e. Establish rules that are clear and specific; they avoid vague or unenforceable rules such as “be in the right place at the right time.”
g. Involve older students in helping to establish standards and sanctions.
h. Apply consistent, equitable discipline for all students, making certain that sanctions are clearly linked to students’ inappropriate behavior.
i. Avoid the use of corporal punishment.
j. Teach and reinforce positive, prosocial behaviors and skills, including self-control skills, especially with students who have a history of behavior problems.
k. Stop disruptions quickly, taking care to avoid distracting the whole class.
l. Focus on students' inappropriate behavior when taking disciplinary action—not on their personalities or histories.
m. Handle most disciplinary matters in the classroom, keeping referrals to administrators to a minimum.
n. Participate in training activities to improve classroom management skills.

Key references
Allen (1986); Anderson, Evertson, and Emmer (1980); Bain, Lintz, and Word (1989); Bielefeldt (1990); Brophy (1979, 1983a, 1986a); Brophy and Good (1986); CEDaR/PDK (1985); Cotton (1990b); Doyle (1986); Emmer and Aussiker (1989); Emmer and Evertson (1981a,b); Emmer, et al. (1982); Evertson (1985, 1989); Evertson and Harris (1992); Fenwick (1996); Gaffney (1997); Gettinger (1988); Good and Brophy (1986); Gottfredson, Gottfredson, and Hybl (1993); Hawkins, Doueck, and Lishner (1988); Heins (1996); Johns and Espinosa (1996); Kounin (1977); Leming (1993); Martens and Kelly (1993); Mayer (1993); Medley (1979); Render, Padilla, and Krank (1989); Rutter, et al. (1979); Sanford and Evertson (1981); Sheets and Gay (1996); Sherrill, et al. (1996); Solomon, et al. (1988); Teddlie, Kirby, and Stringfield (1989); Vincenzi and Ayer (1985)

2.2 School

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, parents, 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 decisionmaking responsibility gradually, i.e., in one governance area (curriculum, instruction, budget, etc.) at a time.
f. Function as a true decisionmaking body rather than merely an advisory one, e.g., the principal does not have veto power over team decisions.
g. Involve teacher participants in decisionmaking 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 (non-graded) grouping, especially for primary-level children, and at least explore the possibility of implementing this structure.

**Key references**

Abadzi (1984, 1985); Affleck, et al. (1988); Berends (1995); Brookover and Lezotte (1979); Brown and Martin (1989); California SDE (1977); Cohen (1986); Cooper (1997); Cotton (1993b); Eames (1989); Evans (1996); Gamoran (1987, 1992); Gamoran and Berends (1987); Gamoran and Weinstein (1995); Gutierrez, and Slavin (1992); Haller (1985); Hallinan (1984); Hawley, et al. (1984); Jeanroy (1996); Kulik (1993); Levine and Lezotte (1990); Miller (1990); Noland and Taylor (1986); Oakes (1985, 1986a,b); Oakes, et al. (1990); Pavan (1992a,b); Peterson, Wilkinson, and Hallinan (1984); Schneider (1989); Slavin (1987a,b, 1993, 1994b); Slavin, et al. (1993); Sorensen and Hallinan (1986); Stegelin (1997); Tanner and Decotis (1995); Webb (1980); Winsler and Espinosa (1990)
2.2.3 Administrators and Teachers Assure that School Time is Used 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; may employ block scheduling to assure adequate time allocations for core subjects; 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.

k. Review alternative scheduling strategies and make solutions based on the needs of students and staff.

Key references

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. Know that corporal punishment is ineffective, illegal in many settings, and ethically questionable; they establish policies against its use.

f. Make certain that students understand why they are being disciplined, in terms of the code of conduct.

g. Carry out discipline in a neutral, matter-of-fact way, focusing on the student’s behavior rather than personality or history.

h. Develop and use methods for providing positive reinforcement for appropriate behavior, particularly for those students with a history of behavior problems.

i. Assist students with behavior problems to develop social interaction, self-control, and anger management skills.

j. Avoid expulsions and out-of-school suspensions whenever possible, making use instead of in-school suspension accompanied by assistance and support.

k. Engage in problem solving with each other and with students to address discipline issues, focusing on causes rather than symptoms.

l. Strike agreements with parents about ways to reinforce school disciplinary procedures at home.

m. Adapt any discipline programs developed in other settings so that they match local circumstances and needs.

n. Develop and implement, as needed, projects to prevent violence and gang activity.

o. Engage in training activities to improve skills in prevention and remediation of violence and other discipline problems.
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. Maintain a no-tolerance policy for graffiti or other vandalism of school facilities or grounds.

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

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

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

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

Key references

Anderson, C.S. (1985); Boyd (1992); Cooze (1995); Darder and Upshur (1992); Earthman, Cash, and Van Berkum (1995); Glatthorn (1989); Good and Brophy (1986); Hawley, et al. (1984); Hess (1987); Levine and Lezotte (1990); Little (1982); Peng (1987); Rutter, et al. (1979); Sammons, Hillman, and Mortimore (1995); Shann (1990); Teddlie, Kirby, and Stringfield (1989); Watson (1996); Wilson and Corcoran (1988)
2.2.6 Administrators and Teachers Work to Create and Maintain Small-Scale Learning Environments

Administrators and teachers:

a. Know that research favors smaller learning environments over larger ones for student achievement, attitudes, and social behavior, as well as teacher and administrator morale.

b. Know that larger schools do not necessarily have lower per-pupil costs or better curricula than smaller schools.

c. Make sure research on the effects of school size is made available to decisionmakers when changes are under consideration (e.g., consolidation, division into schools-within-schools, creation of house plans, etc.).

d. Assist young people who are not succeeding in school to explore other options, including small alternative schools.

e. In larger schools, create divisions into small, stable, cross-grade groupings (e.g., advisories, homerooms) in which students can extend and receive support over several years’ time.

f. In larger schools, create opportunities for high-needs students to learn in smaller groups whenever possible.

Key references


2.3 District

2.3.1 District Leaders and Staff Delegate Considerable Decisionmaking Authority to Schools

District leaders and staff:

a. Communicate to the community what school-based management is and engage their interest and participation.

b. Work with schools to establish broadly representative school-based management teams that draw their membership from administrators, teachers, students, noncertified staff, parents, and community members.

c. Make themselves available to provide training, research-based information, and onsite assistance to help schools implement school-based management.
d. 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 decisionmaking and conflict resolution.

e. Provide resources, such as time and financial support for planning and carrying out team activities.

f. Ensure that team members have genuine decisionmaking power.

g. Increase schools' latitude for decisionmaking through helping them to have state and local regulations waived as appropriate.

h. Involve teacher union representatives in discussions of school-based management, which increases their willingness to be flexible about contract constraints.

i. Assist schools to evaluate and modify their school-based management structures based on continuous review of program activities and their effects.

Key references: Arterbury and Hord (1991); Caldwell and Wood (1988); Ceperley (1991); David (1989); David and Peterson (1984); Davidson (1993); Duttweiler (1989, 1990); English (1989); Ferguson and Nochelski (1996); Fullan (1993); George, Grissom, and Just (1996); 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 (1994); Murphy and Hallinger (1993); Mutchler (1989); Newmann and Wehlage (1995); Odden and Wohlstein (1995); Oswald (1995); Robertson and Briggs (1995); Stringfield, et al. (1997); Swain (1996); White (1989); Wohlstein and Mohrman (1996)

2.3.2 District Leaders Are Guided by Research when Making School Size Decisions

District leaders:

a. Know that research favors smaller learning environments over larger ones for superior student achievement, attitudes, and social behavior, as well as teacher and administrator morale.

b. Know that larger schools do not necessarily have lower per-pupil costs or better curricula than smaller schools.

c. Bring research on the effects of school size to bear on decisions regarding consolidation (of schools or districts), division of schools into smaller units, creation of house plans within schools, and establishment and/or maintenance of alternative schools.

d. Work with schools to help young people who are not succeeding in school to explore other options, including small alternative schools.

e. In districts with large schools, support schools' efforts to create smaller and more intimate environments for learning and interpersonal support.
f. Encourage school personnel to make use of effective schooling practices frequently found in smaller schools—team teaching, integrated curriculum, multiage grouping, cooperative learning, experiential learning, flexible scheduling, and performance assessments.

Key references
Berlin and Cienkus (1989); Burke (1987); Cotton (1996b); Foster and Martinez (1985); Fowler (1995); Fowler and Walberg (1991); Gregory (1992); Gregory and Smith (1983); Howley (1994); Jewell (1989); Johnson (1990); Lindsay (1982); McGanney, Mei, and Rosenblum (1989); McGuire (1989); McKenzie (1983); Monk (1987, 1992); Monk and Kadamus (1995); Nachtigal (1992); Raywid (1995); Smith and DeYoung (1988); Smith, Gregory, and Pugh (1981); Stockard and Mayberry (1992); Stolp (1995); Walberg (1992); Williams (1990)

See also 3.3.1—District Support for School Improvement
Instruction and Instructional Improvement
3.1 Classroom

3.1.1 Teachers Carefully Orient Students to Lessons

Teachers:

a. Help students get ready to learn. They explain lesson objectives, in simple, everyday language and refer to them throughout lessons to maintain focus.

b. Post or hand out learning objectives to help students keep a sense of direction and check periodically to assure that objectives are understood.

c. Explain the relationship of a current lesson to previous study, calling attention to key concepts or skills previously covered.

d. Arouse students' interest and curiosity about the lesson content by relating it to things of personal relevance to them.

e. Challenge and inspire students to learn, particularly at the start of difficult lessons. They make certain that students know in advance what is expected and are ready to learn.

f. Use techniques such as advance organizers, study questions, and prediction to prepare students for learning activities.

g. Make students aware that they are expected to contribute to classroom discussions and other participatory activities.

Key references: Block and Burns (1976); Bloom (1976); Brophy (1987); Brophy and Good (1986); Ellis and Worthington (1994); Evertson (1986, 1995); Gersten and Carnine (1986); Good (1984); Good and Grouws (1979a,b); Koo (1992); Lumpkins, Parker, and Hall (1991); McGinley and Denner (1985); Mitchell (1987); Porter and Brophy (1988); Rosenshine (1976, 1983); Rosenshine and Stevens (1986); Slavin (1994a); Snapp and Glover (1990); Stahl and Clark (1987); Stallings (1985c); Streeter (1986); Tomich (1989); Weade and Evertson (1988)

3.1.2 Teachers Provide Clear and Focused Instruction

Teachers:

a. Review lesson activities, give clear written and verbal directions, emphasize key points and instructions, and check students' understanding.

b. Give lectures and demonstrations in a clear and focused manner.

c. Take note of learning style differences among students and, when feasible, identify and use learning strategies and materials that are appropriate to different styles.

d. Give students plenty of opportunity for guided and independent practice with new concepts and skills.

e. Provide instruction in strategies for learning and remembering/applying what they have learned, as well as instruction in test-taking skills.

f. Use validated strategies to develop students' higher-level thinking skills.
g. Select problems and other academic tasks that are well matched to lesson content so student success rate is high. They also provide varied and challenging seatwork activities.

h. Provide computer-assisted instructional activities which supplement and are integrated with teacher-directed learning.

Key references
Bain, Lintz, and Word (1989); Bennett (1991); Brophy (1979); Brophy and Good (1986); Chilcoat (1989); Corno and Snow (1986); Crawford, et al. (1975); Dunn (1984); Ellis and Worthington (1994); Evertson (1989); Fraenkel (1995); Gall, et al. (1990); Gersten, et al. (1984); Gersten and Carnine (1986); Gleason, Carnine, and Boriero (1990); Good and Grouws (1977, 1979a,b); Haller, Child, and Walberg (1988); Kulik and Kulik (1987); Kushner (1997); Levine (1982); Levine and Stark (1982); Madden, et al. (1993); Medley (1979); Metcalf and Cruickshank (1991); Mevarech and Rich (1985); Nickerson (1988); Okey (1985); Paradise and Block (1984); Paris, Oka, and DeBritto (1983); Porter and Brophy (1988); Rosenshine (1979, 1983); Rosenshine and Stevens (1986); Rutter, et al. (1979); Samson (1985); Saracho (1984); Scruggs, White, and Bennion (1986); Slavin (1994a); Snyder, et al. (1991); Stallings (1985a); Stennett (1985); Wang, Haertel, and Walberg (1993-94); Waxman, et al. (1985); Weade and Evertson (1988); Weinstein and Meyer (1986); Weinstein, et al. (1988-89); Woodward, Carnine, and Gersten (1988)

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

Teachers:

a. Give students immediate feedback on their in-class responses and written assignments to help them understand and correct errors.

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

Teachers:

a. Introduce new learning material as quickly as possible at the beginning of the year or course, with a minimum of review or reteaching of previous content. They review key concepts and skills thoroughly but quickly.

b. Use different materials and examples for reteaching than those used for initial instruction; reteaching is more than a “rehash” of previously taught lessons.

c. Reteach priority lesson content until students show they have 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.

Key references

Brophy (1980, 1987); Brophy and Good (1986); Broughton (1978); Cannella (1986); Cohen, Kulik, and Kulik (1982); DiPardo and Freedman (1988); Fuchs, et al. (1996); Gettinger (1983); Gorrell and Keel (1986); Gottfried and Gottfried (1991); Hawkins, Doueck, and Lishner (1988); Hawley, et al. (1984); Kastra, Tollefson, and Gilbert (1987); Kears (1988); Kohn (1994); Kulik and Kulik (1987, 1988); Lysakowski and Walberg (1981); Madden, et al. (1993); McCarthy, Webb, and Hancock (1995); Mortimore, et al. (1988); Page (1992); Porter and Brophy (1988); Rosenshine and Stevens (1986); Rupe (1986); Sammons, Hillman, and Mortimore (1995); Schunk (1983, 1984a,b); Schunk and Swartz (1993); Slavin (1979a,b); Stennett (1985); Stevens (1985); Teddie, Kirby, and Stringfield (1989); Tenenbaum and Goldring (1989)

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

Teachers:

a. Help students to understand that critical and creative thinking are important for success in our rapidly changing world.
b. Provide instruction in study skills, such as paraphrasing, outlining, developing cognitive maps, and using advance organizers.

c. Teach strategies for problem solving, decisionmaking, exploration, classification, and hypothesizing, and provide students opportunities to practice and refine these skills.

d. 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.

Key references Bangert-Drowns and Bankert (1990); Barba and Merchant (1990); Baum (1990); Bransford, et al. (1986); Casey, et al. (1995); Crump, Schlichter, and Palk (1988); Fields (1995); Freseman (1990); Gall, et al. (1990); Haller, Child, and Walberg (1988); Hansler (1985); Herrnstein, et al. (1986); Hoek, van den Eeden, and Terwel (1997); Horton and Ryba (1986); Huddins and Edelman (1986); Kagan (1988); Levine and Ornstein (1993); Lindmark, et al. (1996); Lucangeli, Galderisi, and Cornoldi (1995); Matthews (1989); Mid-continent Regional Educational Laboratory (1985); Norris (1985); Pearson (1982; 1983); Pogrow (1988); Riding and Powell (1986, 1987); Ristow (1988); Robinson (1987); Snapp and Glover (1990); Sternberg and Bhana (1986); Tenenbaum (1986); Wong (1985)

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

Teachers:

a. Make use of classroom questioning to engage student interaction and to monitor student understanding.

b. Structure questions so as to focus students' attention on key elements in the lesson.

c. Pose questions at the beginning of lessons or reading activities for students to consider as they read or listen to new material.

d. 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.
e. Ask lower-cognitive questions that most students will be able to answer correctly when helping students to acquire factual knowledge.

f. Ask a majority of higher-cognitive questions (50 percent or more) of students above the primary grades during classroom recitations.

g. Allow generous amounts of “wait-time” when questioning students—at least three seconds for lower-cognitive questions and more for higher-cognitive ones.

h. Continue to interact with students whose initial responses are inaccurate or incomplete, probing their understanding and helping them to produce better answers.

i. Make certain that both faster and slower learners have opportunities to respond to higher cognitive questions and are given sufficient wait-time.

Key references
Atwood and Wilen (1991); Barnette, et al. (1995); Brophy (1986b, 1987); Brophy and Good (1986); Ciardiello (1986); Cotton (1989a); Ellis (1993); Gall (1984); Good (1984); Honea (1982); Hoxmeier (1986); Johnston, Markle, and Haley-Oliphant (1987); Makin (1996); Mansfield (1996); Osman and Hannafin (1994); Redfield and Rousseau (1981); Riley (1986); Samson, et al. (1987); Slavin (1994a); Stevens (1985); Swift and Gooding (1983); Swift, Swift, and Gooding (1984); Tobin and Capie (1980, 1981); Winne (1979)

3.2 School

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

Administrators and other leaders:

a. 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. Analyze data on student performance and use findings to inform improvement decisions.

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

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

f. Focus efforts on factors identified by research as critical to successful restructuring: results orientation, high standards, effective teaching practices, parent involvement, professional development, and use of technology.
g. Consider school contextual factors when undertaking restructuring efforts—factors such as availability of resources, nature of incentives and disincentives, linkages within the school, school goals and priorities, factions and stresses among the staff, current instructional practices, and legacy of previous innovations.

Key references
Cawelti (1997); Education Commission of the States (1995); Fortune, Williams, and White (1992); Fullan (1993); George, Grissom, and Just (1996); Johnson (1997); Lee and Smith (1993, 1995, 1996); Leithwood (1994); Lewis (1989); McCarthy and Still (1993); Murphy and Hallinger (1993); Newmann, King, and Rigdon (1997); Prestine (1993); Prestine and Bowen (1993); Smith and Lee (1996); Wohlstetter and Mohrman (1996)

3.2.2 Strong Leadership Guides the Instructional Program

Administrators and other instructional leaders:

a. Believe that all students can learn and that the school makes the difference between success and failure.

b. Emphasize learning as the most important reason for being in school; public speeches and writings emphasize the importance and value of high achievement.

c. Have a clear understanding of the school’s mission and are able to state it in direct, concrete terms. They establish an instructional focus that unifies staff.

d. Seek, recruit, and hire staff members who will support the school’s mission and contribute to its effectiveness.

e. 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.

Key references
Andrews and Soder (1987); Bamberg and Andrews (1991); Beck and Murphy (1996); Berman and McLaughlin (1979); Biester, et al. (1984); Bossert (1988b); Brookover (1979, 1981); Brookover and Lezotte (1979); Brundage (1979); Cavelti (1987, 1997); Cohen (1994); Cohen, et al. (1989); Corbett, Dawson, and Firestone (1984); Crisci, et al. (1988); Crone and Teddle (1995); DeBevoise (1984); Druian and Butler (1987); Eberts and Stone (1988); Edmonds (1979a); Emrick (1977); Everson, et al. (1986); Fullan (1993); George, Grissom, and Just (1996); Glasman (1984); Good and Brophy (1986); Hallinger, Bickman, and Davis (1989); Hallinger and Heck (1996); Hawley, et al. (1984); Heck (1992); High and Achilles (1986); Krug (1992); Larsen (1987); Leithwood and Montgomery (1982, 1985); Levine and Lezotte (1990); Little (1982); Louis and Miles (1990); Madden, Lawson, and Sweet (1976); Newmann, King, and Rigdon (1997); Ogawa and Hart (1985); Pavan and Reid (1991, 1994); Purkey and Smith (1983); Rosenholtz (1985, 1989a,b); Sammons, Hillman, and Mortimore (1995); Schmitt (1990); Sheppard (1996); Terry (1996); Venezky and Winfield (1979); Weber (1971)

3.2.3 Administrators and Other Leaders Continually Strive to Improve Instructional Effectiveness

Administrators and other leaders:

a. Expect that educational programs will be changed so that they work better; they are never complacent about student achievement.

b. Regard themselves and one another as responsible for students' academic performance.

c. 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.

d. 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.

e. Review programs and practices shown to be effective in other school settings for their potential in helping to meet school needs.

f. Specify clearly the roles and responsibilities for the various aspects of the school improvement effort.

g. Check implementation carefully and frequently, note and publicize progress, and modify activities to make things work better.
h. Secure and earmark resources to support improvement activities, acquire resources from many sources including the community, and make resource allocations based on instructional priorities.

i. Refine assessments, so that they accurately reveal what students know and can do.

j. Renew or redirect the improvement focus as goals are achieved, report and celebrate success, and work with staff to establish new goals.

k. 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.

l. Provide periodic events to acknowledge and celebrate successes and to renew interest and energy for continued school improvement work.

Key references
Bamburg and Andrews (1989, 1991); Beck and Murphy (1996); Berman and McLaughlin (1979); Biester, et al. (1984); Bossert (1988b); Bossert, et al. (1982); Boyd (1992); Brookover (1979); Brundage (1979); Cawelti (1997); David (1989); Deal and Peterson (1993); Education Commission of the States (1995); Edmonds (1979a,b); Emrick (1977); Everson, et al. (1986); Evertson (1986); Fullan (1992, 1993); Gall, et al. (1984); Good and Brophy (1986); Hallinger and Hausman (1993); Hawley, et al. (1984); Hord (1990, 1992a); Hord and Huling-Austin (1986); Leithwood and Montgomery (1982); Levine (1990); Levine and Lezotte (1990); Little (1982, 1986); Louis and King (1993); Louis and Miles (1990); Madden, Lawson, and Sweet (1976); Murphy and Hallinger (1993); Newmann, King, and Rigdon (1997); Oakes (1989); Pavan and Reid (1994); Purkey and Smith (1983); Rosenholtz (1985, 1989a,b); Sparks (1983, 1986); Speck (1996); Stringfield and Teddlie (1988); Venezky and Winfield (1979); Weber (1971); Weller and Weller (1997)

3.2.4 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 and encourage them to assume leadership roles in planning and carrying out some of the activities.

d. Provide activities that enhance teachers’ capabilities in the major areas of 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, report outcomes, and adjust strategies.
i. Build into staff development activities the opportunity for participants to share ideas and concerns regarding the use of new programs and practices.
j. Provide or arrange for ongoing technical assistance for school staff as they pursue school improvement activities.
k. Provide follow-up activities to ensure that newly acquired knowledge and skills are applied in the classroom.
l. Make resources available for staff to participate in individual professional development activities to enhance job-related knowledge and skills.
m. Create structures for staff members to learn from one another through peer observation/feedback and other collegial learning activities.
n. Work to establish a norm of collegiality—a professional learning community in which staff members will routinely learn and work together to improve the instructional program.

Key references
Adey (1997); Bamburg and Andrews (1991); Beck and Murphy (1996); Bennett (1987); Block (1983); Boyd (1992); Boyd and Hord (1994); Butler (1989, 1992); Cawelti (1997); Corcoran (1985); da Costa (1995); David (1989); Deal and Peterson (1993); Eubanks and Levine (1983); Everson, et al. (1986); Evertson (1986); Fullan (1992, 1993); Gage (1984); Gall, et al. (1984); Gall and Rencleer (1985); Hawley, et al. (1984); Hord (1997); Hord and Huling-Austin (1986); Joyce (1987); Joyce and Showers (1980); Joyce, et al. (1989); Kohler, Crilley, and Shearer (1997); Korinek, Schmid, and McAdams (1985); Lee and Smith (1996); Levine, Levine, and Eubanks (1987); Levine and Lezotte (1990); Little (1982, 1986); Loucks-Horsley, et al. (1987); Louis and King (1993); Louis, Marks, and Kruse (1996); Louis and Miles (1990); March, et al. (1993); Murphy and Hallinger (1993); Newmann and Wehlage (1995); Oakes (1989); Peterson (1997); Rosenholtz (1985, 1989a,b); Sammons, Hillman, and Mortimore (1995); Sparks (1983, 1986); Sparks and Loucks-Horsley (1990); Speck (1996); Stevenson (1987); Wade (1984-85); Warren and Muth (1995); Wohlstetter and Mohrman (1996)
3.3 District

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

District leaders and staff:
a. 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.

Key references

Berman and McLaughlin (1979); Biester, et al. (1984); Boone (1992); Corbett and Wilson (1992); David (1989); Everson, et al. (1986); Ferguson and Nochelski (1996); George, Grissom, and Just (1996); Gersten, Carine, and Zoref (1986); Hord (1992b); Huberman and Miles (1984a); Jackson and Crawford (1991); LaRocque and Coleman (1988); Levine and Lezotte (1990); Levine and Stark (1982); Louis and Miles (1990); Manley (1996); Miller, Smey-Richman, and Woods-Houston (1987); Murphy, et al. (1987); Murphy and Hallinger (1993); Pajak and Glickman (1987); Peterson, Murphy, and Hallinger (1987); Purkey and Smith (1983); Schlechty (1985); Stringfield (1996); Wilson and Corcoran (1988); Wohlstetter and Mohrman (1996)

See also See 1.3.3—Policies Supporting Excellence and Equity
4

Interactions
4.1 Classroom

4.1.1 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. Believe in their own efficacy as teachers and communicate that belief to students.

c. 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.

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

e. 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.

f. 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.

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

Key references

Babad (1996); Bain, Lintz, and Word (1989); Bamburg (1994); Berliner (1979, 1985); Block (1983); Block and Burns (1976); Bloom (1976); Brookover, et al. (1978); Brophy (1983b, 1987); Brophy and Good (1986); Cooper and Good (1983); Cooper and Tom (1984); Cotton (1989c); Deshon (1997); Edmonds (1979a,b); Fraenkel (1995); Gersten, Cantine, and Zoref (1986); Good (1982, 1987); Gottfredson, Marciniak, and Birdseye (1995); Hawley, et al. (1984); Kenealy, Frude, and Shaw (1991); Kushman (1997); Levine and Lezotte (1995); Mansfield (1996); Marshall and Weinstein (1985); Mortimore, et al. (1988); Murphy (1996); Paredes and Frazer (1992); Patriarca and Kragt (1986); Porter and Brophy (1988); Pratton and Hales (1986); Rosenshine (1983); Ross (1995); Sammons, Hillman, and Mortimore (1995); Saracho (1991); Slavin (1994a); Stevens (1985); Teddlie, Kirby, and Stringfield (1989); Weinstein, Madison, and Kuklinski (1995); Woolfolk and Brooks (1985)
4.1.2 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—as in some cooperative learning structures.

Key references


4.1.3 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.

f. Use humor, as appropriate, to diffuse stress and build affinity with students.

Key references

4.2 School

4.2.1 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.
4.2.2 Administrators and Other Leaders Provide Incentives, Recognition, and Rewards to Build Strong Staff Motivation

Administrators and other leaders:

a. Involve teachers in developing the incentive program.

b. 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.

c. 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.

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

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

Key references
Abelmann and Kenyon (1996); Anderson, C.S. (1985); Armor, et al. (1976); Block (1983); Boyd (1992); Brookover (1979); Brookover and Lezotte (1979); Cresswell and Fisher (1996); Fullan (1990); Fullan and Stiegelbauer (1991); Good and Brophy (1986); Hawley, et al. (1984); Levine and Eubanks (1989); Levine and Lezotte (1990); Little (1982); Louis and Miles (1990); Mortimore, et al. (1988); Oakes (1989); Purkey and Smith (1983); Rosenholtz (1985, 1989a,b); Vincenzi and Ayrer (1985); Wade (1984-85); Wilson and Corcoran (1988); Wohlstetter and Mohrman (1996); Zigarelli (1996)

4.2.3 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 by providing activities to develop good health habits and self-esteem, as well as activities meant to prevent dropping out, pregnancy, drug use, 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.

Key references

4.3 District

4.3.1 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.

Key references
David (1989); Everson, et al. (1986); Louis and Miles (1990); Miller, Smey-Richman, and Woods-Houston (1987); Murphy and Hallinger (1988); Murphy and Peterson (1985); Murphy, et al. (1987); Odell and Ferraro (1992); Swain (1996); Wilson and Corcoran (1988)

See also 2.3.1—Delegating Authority to Schools
Equity
5.1 Classroom

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

Teachers:

a. Use approaches such as adult-child tutoring, peer 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.

Key references
Anderson (1983); Bamburg (1994); Behets (1997); Brophy (1986b, 1988b); Brown and Saks (1986); Cooper, Findley, and Good (1982); Cooper and Tom (1984); Cotton (1989c, 1991b); Crawford (1989); Druian and Butler (1987); Gall, et al. (1990); Gettinger (1984, 1989); Good (1987); Griswold, Cotton, and Hansen (1986); King-Sears and Bradley (1995); Levine (1994); Lumpkins, Parker, and Hall (1991); Madden, et al. (1993); McManus and Gettinger (1996); Murphy (1996); Ross, et al. (1997); Sammons, Hillman, and Mortimore (1995); Seifert and Beck (1984); Slavin (1980, 1984, 1987b, 1988a, b, 1989a, 1996a, b); Slavin, Karweit, and Madden (1989); Slavin, Karweit, and Wasik (1994); Slavin and Madden (1989, b); Stein, Leinhardt, and Bickel (1989); Stevens and Slavin (1995); Walberg (1995); Waxman, et al. (1985); Weinstein, Madison, and Kuklinski (1995)

5.1.2 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 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. Assist families to access counseling services to help them cope effectively with stress and family problems.

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

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Key references:
Benard (1993a,b); Berg and VanBrockern (1995); Berliner and Benard (1995); Black (1997); Carlson and Peterson (1995); DeFord (1996); Glaser, Larsen, and Nichols (1992); Gottfredson, Marciniak, and Birdseye (1995); Grossman, et al. (1992); Kalkowski (1995); Linquanti (1992); Luthar (1991); Mahoney and Cairns (1997); Midgley, Feldlaufer, and Eccles (1989); Pierce (1994); Sayger (1996); Slavin (1996b); Stevens and Slavin (1995); Waxman, Huang, and Padron (1997)

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5.1.3 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.

Key references

5.2 School

5.2.1 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 preschoolers; 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., Title I) 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 computer-assisted instruction, and peer, cross-age, and volunteer tutoring.

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 classrooms—not to support them indefinitely.

l. Avoid long-term academic tracking.

m. Use findings from ongoing monitoring efforts to adapt instruction to students’ individual needs.

Key references

Allington and Johnston (1989); Bain and Jacobs (1990); Becker (1987); Brophy (1982); Chall and Snow (1988); Cooper (1997); Cotton (1989c); Crawford (1989); Cuban (1989); Druian and Butler (1987); Falbo (1996); Gall, et al. (1990); Gamoran and Weinstein (1995); Glaser, Larsen, and Nichols (1992); Gottfredson (1988); Griswold, Cotton, and Hansen (1986); Honig (1989); Irmsher (1997); Knapp, Turnbull, and Shields (1990); Levine (1994); Levine and Eubanks (1989); Levine, Levine, and Eubanks (1987); Madden, et al. (1993); McPartland and Slavin (1990); National Center for Research in Vocational Education (1989); Nye, et al. (1992); Prohm, et al. (1995); Robinson (1990); Ross et al. (1997); Rowan and Guthrie (1989); Slavin (1987b, 1989a, 1994b, 1996a,b); Slavin, Karweit, and Madden (1989a,b); Slavin, Karweit, and Wasik (1994); Slavin and Madden (1989); Stein, Leinhardt, and Bickel (1989); Stevens and Slavin (1995); Walters and Borgers (1995); Wasik and Slavin (1994); Waxman, Huang, and Padron (1997); Westbury (1994); Wheelock and Dorman (1988)

5.2.2 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. Supplement standardized testing with portfolio assessment and other alternative assessments.

d. Gather information on ways to meet the needs of underserved groups.

e. Implement practices identified by research as promoting the achievement of high-needs groups (cited throughout this document).
5.2.3 Administrators and Teachers Work to Establish and Maintain Positive Relationships Among People of Different Socioeconomic and Cultural Backgrounds

Administrators and teachers:

a. Model harmonious intercultural relationships among themselves. Administrators attempt to recruit, hire, and retain staff representing different cultural backgrounds, especially in culturally diverse settings.

b. Promote activities which allow staff and students to benefit from contact with those who are socioeconomically or culturally different from themselves. These include extracurricular activities in which people have the opportunity to get to know one another as individuals and advance personal or group goals.

c. Communicate positive regard for students of different socioeconomic and cultural groups by holding high expectations for all students and treating them equitably.

d. Assure that efforts to increase intergroup harmony include attention to cross-gender relationships. They communicate high expectations to boys and girls taking nontraditional courses and take a firm stand against sexual harassment.

e. Contribute to the development of students’ self-esteem by treating them with warmth and respect and offering them opportunities for academic success.

f. Make it clear to students that demeaning statements, jokes, and graffiti related to gender, culture, race, sexual orientation, and so on, are not acceptable.

g. Avoid the use of practices known to be detrimental to intergroup relations, e.g., academic tracking, communicating differential expectations of students based on cultural group, gender, or other factors unrelated to learning ability.

h. Review curricular materials periodically to assure freedom from gender, racial, ethnic, or other biases.

i. Understand and employ culturally appropriate policies and responses regarding student behavior.
5.2.4 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 multicultural education activities; administrators provide ongoing support.

Key references
Byrnes and Kiger (1987); Campbell and Farrell (1985); Cotton (1993b); D’Andrea and Daniels (1995, 1996); Darder and Upshur (1992); Garcia, Powell, and Sanchez (1990); Gimmestad and DeChiara (1982); Gottfredson, Nettles, and McHugh (1992); Grant, Sleeter, and Anderson (1986); Hart and Lumsden (1989); Kandarakis (1996); Levine and Lezotte (1990, 1995); Lomotey (1989); MacPhee (1997); Merrick (1988); Pate (1981, 1988, 1995); Pine and Hilliard (1990); Rich (1987); Swisher (1990); Valverde (1988)

5.2.5 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 facility so that they can learn from one another.

Key references

Ascher (1985); ASCD Panel (1987); Collier (1992); Cummins (1986); Darder and Upshur (1992); Fillmore and Valadez (1986); Fueyo (1997); Garcia (1988, 1990); Huang, de Felix, and Waxman (1997); Lucas, Henze, and Donato (1990); National Commission on Secondary Education for Hispanics (1984); Ramirez, Yuen, and Ramey (1991); Reyes (1992); Saldate, Mishra, and Medina (1985); So (1987); Tikunoff (1985); Valadez and Gregoire (1989); Zuniga-Hill and Yopp (1996)

5.3 District

See 1.3.3—Policies Supporting Excellence and Equity
Special Programs
6.1 Classroom

6.1.1 Teachers Use Validated Practices for Preventing Tobacco, Alcohol, and Drug Use

Teachers:

a. Provide activities that move beyond giving information to influencing attitudes and behavior.

b. 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.

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

d. Provide periodic “booster” sessions after initial instruction, recapping major points and offering opportunity for discussion and role playing.

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

f. Know that “scare tactics” do not work and avoid using them.

g. Involve parents in prevention efforts and coordinate in-school efforts with those of community organizations.

Key references


See also 5.1.1—Learning Support for High-Needs Students

6.2 School

6.2.1 Administrators and Teachers Implement Policies and Programs 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. Target some prevention activities to specific, high-risk groups—innersity youth, girls, gay and lesbian youth, and emotionally disturbed and learning disabled students.

c. Set and enforce clear policies regarding drug possession, use, or sale.
d. Provide aftercare support for students who have received alcohol or drug treatment or are involved in smoking cessation.

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

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

Key references


6.2.2 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 and/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.

g. Conduct outreach activities to engage dropout-prone students in extracurricular activities.

Key references

Baecher, Cicchelli, and Baratta (1989); Bickel, Bond, and LeMahieu (1986); Dryfoos (1990); Falbo (1996); Glaser, Larsen, and Nichols (1992); Hayward and Tallmadge (1995); Hergert (1991); Irmscher (1997); Mahoney and Cairns (1997); Mayer (1993); Orr (1987); Paredes and Frazer (1992); Peck, Law, and Mills (1987); Presson and Bottoms (1992); Rossi, et al. (1995); Wehlage (1991); Williams (1987); Woods (1995)

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

Key references: Ascher (1988, 1990); Bain and Herman (1989); Burnett (1994); Capper (1994); Cohen (1989); Comer (1988); Comer, et al. (1986); Cotton (1992c); Cuban (1989); Fillmore and Valadez (1986); Gursky (1990); Guthrie and Guthrie (1991); Hardy (1996); Hodgkinson (1991); Kerka (1997); Madden, et al. (1993); McCurdy (1990); McPartland and Slavin (1990); Newman (1995); Oakes (1987); Pollard (1990a,b); Sayger (1996); Shaw, Kelly, and Joost (1995); Smithmier (1995); Sylvester (1990); Vandegrift, et al. (1994); Yon, Mickelson, and Carlton-LaNey (1993); Zigler and Finn-Stevenson (1994)

6.3 District

6.3.1 District Leaders Help Schools Carry Out Prevention Activities and Support High-Needs Students and Families in Accessing Needed Services

District leaders:

a. Work with schools to develop and implement firm discipline policies.

b. Help school staff 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.

**Key references**

Baecher, Cicchelli, and Baratta (1989); Barnes (1984); Benard (1993); Cohen (1989); Cotton (1990a, 1992c); Driscoll (1990); Fenley, et al. (1993); Izu and Carreon (1994); Jang (1994); Murray and Mess (1986); Petersen (1997); Simun, et al. (1996); Sylvester (1990); Wilson-Brewer, et al. (1991); Woods (1995)
Assessment
7.1 Classroom

7.1.1 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 aware of the limitations of assigning grades and avoid doing so in most day-to-day activities.
f. Are knowledgeable about assessment methodology and use this knowledge to select or prepare valid, reliable assessments.
g. 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.
h. Review assessment instruments and methods for cultural, gender, and other bias and make changes as needed.
i. 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.
j. Set grading scales and mastery standards high to promote excellence.
k. Encourage parents to keep track of student progress.

Key references

Bain, Lintz, and Word (1989); Block, Efthim, and Burns (1989); Bloom (1974); Brookover (1979); Brophy and Good (1986); Cohen, S.A. (1994); Cohen, et al. (1989); Costa and Kallick (1992); Dillashaw and Okey (1983); Engman (1989); Evertson (1986); Evertson, et al. (1983); Fuchs and Fuchs (1986); Fuchs, Fuchs, and Tindal (1986); Good and Grouws (1979a); Guskey (1994); Howell and McCollum-Gahley (1986); Kershaw and McCaslin (1995); Mortimore, et al. (1988); Natriello (1987); O'Conner (1995); Porter and Brophy (1988); Rosenshine (1983); Rosenshine and Stevens (1986); Sammons, Hillman, and Mortimore (1995); Slavin, Karweit, and Madden (1989); Stiggins (1991, 1995a,b); Tomic (1989); Walberg, Paschal, and Weinstein (1985)
7.1.2 Teachers Make Use of Alternative Assessments as Well as Traditional Tests

Teachers:

a. Participate in staff development activities that prepare them to develop rubrics, establish standards, and design tasks.

b. Communicate to students and parents that assessments involving performances and products are the best preparation for life outside of school.

c. Begin by using alternative assessments on a small scale. They recognize that the best assessments are developed over time and with repeated use.

d. Plan assessments as they plan instruction—not as an afterthought.

e. Develop assessments that have instructional value as well as measuring student learning.

f. 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.

g. Secure input from older students for establishing performance criteria.

h. Involve students in peer assessment activities, such as peer editing.

i. Collect assessments used profitably by others and use or adapt these for their own classrooms.

Key references

Arter, et al. (1994); Belk and Calais (1993); Borko, Mayfield, and Marion (1997); Darling-Hammond, Ancess, and Falk (1995); Fuchs and Deno (1994); Goldberg (1996); Herman (1992); Lazzaro (1996); Leitner and Trevisan (1993); McTighe and Ferrara (1994); Moening and Bhavnagri (1996); National Commission on Research in Vocational Education (1995); Nelson and Drake (1997); Newmann, Marks, and Gamoran (1995); Pressley, et al. (1997); Rueda and Garcia (1997); Saturnelli and Repa (1995); Schnitzer (1993); Shavelson and Baxter (1992); Sperling (1993); Stiggins (1994, 1995a,b); Welch (1995)

See also 3.1.3—Feedback and Reinforcement

7.2 School

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.

Key references: Block (1983); Blum and Butler (1985); Bossert (1985); Brookover (1979); Cawelti (1987, 1997); Cizek (1995); Cohen (1991, 1994); Cohen, et al. (1989); Corcoran (1985); Costa and Kallick (1992); Edmonds (1979a); Everson, et al. (1986); Fullan (1992); Glasman (1984); Griswold, Cotton, and Hansen (1986); Hawley, et al. (1984); Hord (1992a); Krug (1992); Leithwood and Montgomery (1982); Levine and Lezotte (1990); Louis and Miles (1990); Madden, Lawson, and Sweet (1976); Mortimore and Sammons (1987); Mortimore, et al. (1988); Pajak and Glickman (1987); Purkey and Smith (1983); Slavin, Karweit, and Madden (1989); Stiggins (1991, 1995a, b); Venezky and Winfield (1979); Weber (1971); Wilson and Corcoran (1988)

7.2.2 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. Insist upon the use of performance assessments in vocational and other career-related educational programs.

e. Arrange for staff development activities to build alternative assessment skills, such as developing rubrics, establishing standards, designing performance tasks, and managing portfolio assessments.
f. Work with staff to systematize methods for collecting and reporting information produced by alternative assessments.

g. Collect and make available alternative assessment resources developed and used in other settings.

Key references

Baker (1992); Belk and Calais (1993); Calfee and Perfumo (1993); Costa and Kallick (1992); Darling-Hammond, Anciae, and Falk (1995); Gaustad (1996); Haas (1990); Herman (1992); Hodges (1992); Leitner and Trevisan (1993); McMullen (1993); Moening and Bhavnagri (1996); Monson and Monson (1997); National Commission on Research in Vocational Education (1995); Newell (1992); Rafferty (1993); Rueda and Garcia (1997); Shavelson and Baxter (1992); Shepard (1989); Telese (1993); Wiggins (1992)

7.3 District

7.3.1 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 the 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.

Key references

Behr and Bachelor (1981); Everson, et al. (1986); George, Grissom, and Just (1996); Hord (1992b); 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); Stiggins (1995a,b)
7.3.2 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. Establish a policy requiring the use of performance assessments in vocational and other career-related educational programs.

d. Develop and maintain a districtwide “tool kit” of exemplary tasks, task templates, and design criteria for tasks.

Key references  Baker (1992); Belk and Calais (1993); Impara and Plake (1996); Leitner and Trevisan (1993); National Commission on Research in Vocational Education (1995); Wiggins (1992)
Parent and Community Involvement
Parent and Community Involvement

8.1 Classroom

8.1.1 Teachers Involve Parents and Community Members in Supporting Children's Learning

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. Make parents of young children aware that the earlier they become involved in their child's education, the more it benefits his or her learning.

c. Encourage parents of young children to read to their children—every day if possible, and for at least 10 minutes at a time.

d. Initiate contact with parents and seek to involve them in parent-teacher conferences to discuss their children's progress and note any areas of difficulty.

e. Communicate to parents that students of all ages benefit from parent involvement.

f. Make extra efforts to reach out to parents who have traditionally been underrepresented in parent involvement activities—ethnic and racial minority parents, those whose primary language is not English, and parents from low socioeconomic backgrounds.

g. Send home to parents information about upcoming classroom activities, examples of students' work, and suggestions for at-home learning activities.

h. Make parents aware of various ways they can help their child learn and support the school's instructional program—helping their children learn at home, helping out in the classroom, providing transportation for field trips, etc.

i. Involve community members in schoolwide and classroom activities, giving presentations, serving as information resources, functioning as the audience for students' published writings, etc.

j. Provide parents and community members with information and techniques for helping students learn (e.g., training sessions, handbooks, make-and-take workshops, etc.).

k. Encourage parents to provide a suitable place with necessary materials for children to study at home, and monitor the homework habits of children at least through the elementary grades.

l. Remain mindful that parents are busy people with limited time and refrain from asking them to devote unrealistic amounts of time to school-related activities.
Key references
Armor, et al. (1976); Becher (1984); Beck and Murphy (1996); Block (1983); Brookover (1979); Carey and Farris (1996); Cawelti (1997); Cotton (1991b); Cotton and Wiklund (1989); Cristenson, Rounds, and Gorney (1992); Diez and Moon (1990); George, Grissom, and Just (1996); Griffith (1996); Griswold, Cotton, and Hansen (1986); Gursky (1990); Hawley, et al. (1984); Henderson (1987); Henderson and Berla (1994); Hickman, Greenwood, and Miller (1995); Illinois SBE (1993); Katz (1988); Keith, et al. (1996); Levine and Lezotte (1990, 1995); Levine and Stark (1981, 1982); Murphy (1996); Paulson (1994); Peterson (1997); Sanders (1996); Sattes (1985); Schneider and Coleman (1993); Stevens (1985); Tangri and Moles (1987); Walberg, Bole, and Waxman (1980); Watson, Brown, and Swick (1983); Yap and Enoki (1995)

8.2 School

8.2.1 Administrators and Teachers Involve Parents and Community Members in Learning Support and School Governance

Administrators and teachers:

a. Develop written policies which acknowledge 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 economically 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 decisionmaking 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.
Key references
Baecher, Cicchelli, and Baratta (1989); Becher (1984); Beck and Murphy (1996); Boyd (1992); Carey and Farris (1996); Cotton and Wikelund (1989); David (1989); George, Grissom, and Just (1996); Glaser, Larsen, and Nichols (1992); Grobe (1993); Illinois SBE (1993); Jones and Marti (1994); McCarthy and Still (1993); Murphy (1988); Pavan and Reid (1994); Peterson-del Mar (1994); Sammons, Hillman, and Mortimore (1995); Schneider and Coleman (1993); Stacey (1994); Stiller and Ryan (1992); Tomlinson (1996); Wang, Haertel, and Walberg (1993-94, 1995); Williams and Chavkin (1989); Wilson and Corcoran (1988)

8.3 District

8.3.1 The School District Establishes and Implements Policies Supporting Parent and Community Involvement

District leaders:

a. Develop written policies which acknowledge the importance of parent and community involvement and provide ongoing support to the parent and community involvement efforts of the school.

b. Assist schools in outreach activities aimed at increasing the participation of parent and community members—especially those who have traditionally been underrepresented—in instructional support and school governance.

c. Establish policies about the relationship of the school site councils to the school district; this includes specifying the role of the site councils in the district's strategic plan.

d. Work with schools to develop strategies for dealing with vocal, organized interest groups that are not representative of the school community.

e. Determine permissible exemptions from district policy and procedures.

f. Assist schools in providing parent and community site council members with information about school operations, legal constraints, budget, and other matters they will need to understand in order to function effectively.

g. Assist schools to evaluate the effectiveness of their parent and community involvement activities; this includes gathering and reporting data on the relationship between parent/community involvement and student performance.

h. Work with schools to involve business, industry, and labor in helping to identify important learning outcomes and in providing opportunities to apply school learnings in workplace settings.

Key references
Connelly and Moss (1996); Fruchter, Galetta, and White (1993); Henderson (1994); Henderson and Berla (1994); Peterson-del Mar (1994); Rutherford, Anderson, and Billig (1995); Tomlinson (1996)

See also 2.2.1—School-Based Management and 2.3.1—Delegating Authority to Schools
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 text of this document, plus many others, can be found here in full bibliographic form.

For those users who wish to delve more deeply into topics addressed in the preceding pages, but do not intend to read every document on their topic of interest, the bibliography includes citations for many high-quality summaries and reviews. These are marked with an asterisk (*).

Finally, keep in mind that this bibliography is not comprehensive. While the core of the literature is well represented, some studies not cited here may well be important in furthering the understanding of educational effectiveness.


Achilles, C.M. “Small Classes, Big Possibilities.” The School Administrator 54/9 (October 1997): 6-9, 12, 13, 15.


Baum, R. "Finishing Touches—10 Top Programs." Learning 18/6 (February 1990): 51-55.


Bielefeldt, T. "Classroom Discipline." Research Roundup 5/2 (February 1990) (ED 318 133).


Bossert, S.T.; Dwyer, D.C.; Rowan, B.; and Lee, G.V. “The Instructional Management Role of the Principal.” Educational Administration Quarterly 18/3 (Summer 1982): 34-64.


Brophy, J.E. “Research Linking Teacher Behavior to Student Achievement: Potential Implications for Instruction of Chapter 1 Students.” Educational Psychologist 23/3 (Summer 1988b): 235-286 (ED 293 914).


*Consolidation for Longitudinal Studies. As the Twig is Bent...Lasting Effects of Preschool Programs. Hillsdale, NJ: Erlbaum, 1983 (ED 253 299).


Cotton, K. School-Community Collaboration to Improve the Quality of Life for Urban Youth and Their Families. Topical Synthesis #5. Portland, OR: Northwest Regional Educational Laboratory, 1992c.


DeFord, M.S. A Comprehensive Literature Review in Valuing the Concept of Caring in Middle and Secondary Schools. April 1996 (ED 404 041).


*DeShon, J.P. “Innocent and Not-So-Innocent Contributions to Inequality: Choice, Power, and Insensitivity in a First-Grade Writing Workshop.” Language Arts 74/1 (January 1997): 12-16.


Dutweiler, P.C. A Look at School-Based Management. Insights on Educational Policy and Practice No. 6, January 1989 (ED 330 050).

Dutweiler, P.C., and Mutchler, S.E. "Harnessing the Energy of People to Improve Schools." Insights on Educational Policy and Practice, Special Combined Issue, Summer 1990 (ED 329 021).


Earle, R.S. "Instructional Design Fundamentals as Elements of Teacher Planning Routines and Practices from Two Studies." In Proceedings of Selected Research and Development Presentations at the 1996 National Convention of the Association for Educational Communications and Technology. Indianapolis, IN, 1996 (ED 397 789).


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