Handbook on

Effective Implementation of School Improvement Grants

Carole L. Perlman and Sam Redding, Editors
Center on Innovation & Improvement

Revised 1/2011

Prepared by:

- Assessment and Accountability Comprehensive Center
- Center on Innovation & Improvement
- Center on Instruction
- National Comprehensive Center for Teacher Quality
- National High School Center

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This handbook is not an official Department of Education (USDE) document, and thus the reader must refer to USDE notices, regulations, requests for applications, and guidance for information with legal standing. Rather, this handbook is intended as an aid to the successful implementation of the School Improvement Grants and help in achieving rapid improvement of schools that are persistently low-achieving. Obviously, the topics explored in this handbook are more complex than can be fully explicated in one thin volume, so the handbook directs the reader to resources and references to acquire a fuller understanding of the key concepts in school turnaround and improvement.

The Department of Education announced Interim Final Requirements on January 15. Please take special note of these and any subsequent changes announced by the USDE.

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Information Tools Training

Positive results for students will come from changes in the knowledge, skill, and behavior of their teachers and parents. State policies and programs must provide the opportunity, support, incentive, and expectation for adults close to the lives of children to make wise decisions.

The Center on Innovation & Improvement helps regional comprehensive centers in their work with states to provide districts, schools, and families with the opportunity, information, and skills to make wise decisions on behalf of students.

The Center on Innovation & Improvement is administered by the Academic Development Institute (Lincoln, IL) in partnership with the Temple University Institute for Schools and Society (Philadelphia, PA), Center for School Improvement & Policy Studies at Boise State University (Boise, ID), and Little Planet Learning (Nashville, TN).

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Introduction to the *Handbook*

The Purpose of this Handbook

The purpose of this *Handbook* is to bolster the effective implementation of the intervention models and strategies outlined in the 2010 School Improvement Grant (SIG) program—section 1003(g) of Elementary and Secondary Education Act (ESEA)—in order to achieve the program's clear goal—rapid improvement of persistently low-achieving schools. Especially, this *Handbook* offers succinct and practical explanations of the SIG's required and recommended models and strategies, references to the underlying research, and connections to useful resources.

The intended audience for this *Handbook* includes:

- state education agencies (SEAs),
- local education agencies (LEAs),
- charter management organizations (CMOs),
- education management organizations (EMOs),
- organizational partners engaged in school improvement, and
- schools engaged in rapid improvement.

How to Use this Handbook

This *Handbook* is not an official U.S. Department of Education (USDE) document, and thus the reader must refer to USDE notices, regulations, requests for applications, and guidance for information with legal standing. Rather, this *Handbook* is intended as an aid to the successful implementation of the School Improvement Grants and help in achieving rapid improvement of schools that are persistently low-achieving. Obviously, the topics explored in this *Handbook* are more complex than can be fully explicated in one thin volume, so the *Handbook* directs the reader to resources and references to acquire a fuller understanding of the key concepts in school turnaround and improvement. The editors and authors have strived for conciseness, plain language, and an emphasis on practical application of this *Handbook's* contents.

This *Handbook* is organized into two parts. Part I frames the purposes of the School Improvement Grants, to classify schools within performance strata and identify the "persistently low-achieving" schools, and offers a framework for diagnosing a school's performance and practice in order to target interventions and supports for rapid

improvement. Part II itemizes more than 50 strategies relevant to the School Improvement Grants, connects the strategies with research, cites available resources, and offers action principles for the SEA, the LEA, and the school.

Comprehensive Technical Assistance Centers

The U.S. Department of Education supports a system of "comprehensive technical assistance centers" consisting of 16 regional centers and five national content centers. These centers provide technical assistance primarily to state education agencies, with the regional centers directly serving the states in their regions and the content centers providing expertise, materials, and tools to aid the regional centers in their work. This *Handbook* was developed by the five national content centers:

- Assessment and Accountability Comprehensive Center
- Center on Innovation & Improvement
- Center on Instruction
- National Comprehensive Center for Teacher Quality
- National High School Center

At the time this *Handbook* was being prepared, the regional comprehensive centers were already helping their states prepare for the School Improvement Grants and related federal programs directed at turning around the nation's persistently lowest-achieving schools. The regional centers provide a reliable bridge between the U.S. Department of Education and the states in this challenging and necessary work and will continue to assist their states in other ways as well. Likewise, the national content centers, through their websites, publications, conferences, trainings, and consultations, are a ready resource for the work of SEAs and LEAs. Please see the following directory of the comprehensive technical assistance centers; each center's website includes abundant resources on topics related to the School Improvement Grants.

Comprehensive Technical Assistance Centers

National Content Centers

Assessment and Accountability Comprehensive Center
www.aacompcenter.org
WestEd
Dr. Stanley N. Rabinowitz, *Director*

The Assessment and Accountability Comprehensive Center is housed at WestEd in San Francisco, California.

Center on Innovation & Improvement
www.centerii.org
Academic Development Institute
Dr. Sam Redding, *Director*

The Center on Innovation and Improvement is housed at the Academic Development Institute in Lincoln, Illinois, and is a partner with Temple University's Institute for Schools and Society in Philadelphia, Pennsylvania, and Little Planet Learning in Nashville, Tennessee.

Center on Instruction
www.centeroninstruction.org
RMC Research Corporation
Ms. Angela Penfold, *Director*

The Center on Instruction is housed at the RMC Research Corporation in Portsmouth, New Hampshire.

National Comprehensive Center for Teacher Quality
www.tqsource.org
Learning Point Associates
Dr. Sabrina Laine, *Director*

The National Comprehensive Center for Teacher Quality is housed at Learning Point Associates (LPA) in Naperville, Illinois.

National High School Center
www.betterhighschools.org
American Institutes for Research
Dr. Joseph R. Harris, *Director*

The National High School Center is housed at the American Institutes for Research in Washington, DC.

Regional Comprehensive Centers

Alaska Comprehensive Center
www.alaskacc.org
Southeast Regional Resource Center
Mr. Jerry Schoenberger, *Director*

The Alaska Comprehensive Center serves the state of Alaska.

Appalachia Region Comprehensive Center
www.arcc.edvantia.org
Edvantia, Inc.
Dr. Sharon Harsh, *Director*

The Appalachia Region Comprehensive Center serves the states of Kentucky, North Carolina, Tennessee, Virginia, and West Virginia.

California Comprehensive Center
www.cacompcenter.org
WestEd
Dr. Fred Tempes, *Director*

The California Comprehensive Center serves the state of California.

Florida & Islands Comprehensive Center
www.ets.org/flicc/
Educational Testing Service
Dr. Alice Lindsay, *Director*

The Florida and Islands Comprehensive Center serves the state of Florida, Puerto Rico, and the Virgin Islands.

Great Lakes East Comprehensive Center
www.learningpt.org/greatlakeseast/
Learning Point Associates
Ms. Barbara Youngren, *Director*

The Great Lakes East Comprehensive Center serves the states of Indiana, Michigan, and Ohio.

Great Lakes West Comprehensive Center
www.learningpt.org/greatlakeswest/
Learning Point Associates
Linda E. Miller, *Director*

The Great Lakes West Comprehensive Center serves the states of Illinois and Wisconsin.

The Mid-Atlantic Comprehensive Center
www.macc.ceee.gwu.edu
The George Washington University
Center for Equity & Excellence in Education
Dr. Charlene Rivera, *Director*

The Mid-Atlantic Comprehensive Center serves the states of Delaware, Maryland, New Jersey, and Pennsylvania, and the District of Columbia.

Mid-Continent Comprehensive Center
www.mc3edsupport.org
The Board of Regents of the University of Oklahoma
Dr. Belinda Biscoe, *Director*

The Mid-Continent Comprehensive Center serves the states of Arkansas, Kansas, Missouri, and Oklahoma.

New England Comprehensive Center
www.necomprehensivecenter.org
RMC Research Corporation
Dr. Carol Keirstead, *Director*

The New England Comprehensive Center serves the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

New York Comprehensive Center
www.nycomprehensivecenter.org
RMC Research Corporation
Mr. Larry Hirsch, *Director*

The New York Comprehensive Center serves the state of New York.

North Central Comprehensive Center
www.mcrel.org/nccc
Mid-continent Research for Education and Learning
Dr. Anne Tweed, *Director*

The North Central Comprehensive Center serves the states of Iowa, Minnesota, Nebraska, North Dakota, and South Dakota.

Northwest Regional Comprehensive Center
http://nwrcc.educationnorthwest.org/
Northwest Regional Educational Laboratory
Ms. Kathleen Peixotto, *Director*

The Northwest Regional Comprehensive Center serves the states of Idaho, Montana, Oregon, Washington, and Wyoming.

Pacific Comprehensive Center
www.pacificcompcenter.org
Pacific Resources for Education and Learning
Dr. Hilda Heine, *Director*

The Pacific Comprehensive Center serves the state of Hawaii, and American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, and Yap), Guam, Republic of the Marshall Islands, and the Republic of Palau.

Southeast Comprehensive Center
http://secc.sedl.org
Southwest Educational Development Laboratory
Dr. Robin Jarvis, *Director*

The Southeast Comprehensive Center serves the states of Alabama, Georgia, Louisiana, Mississippi, and South Carolina.

Southwest Comprehensive Center
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WestEd
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The Southwest Comprehensive Center serves the states of Arizona, Colorado, Nevada, New Mexico, and Utah.

Texas Comprehensive Center
http://txcc.sedl.org/
Southwest Educational Development Laboratory
Dr. K. Victoria Dimock, *Director*

The Texas Comprehensive Center serves the state of Texas.

Part I: Identifying Need, Selecting Interventions, and Differentiating Supports

1

The Purpose of the School Improvement Grants

Center on Innovation & Improvement

Section 1003(g) of the Elementary and Secondary Education Act provides for the U.S. Secretary of Education to allocate funds to SEAs for the purpose of school improvement. Within the regulations and guidelines established by the Secretary, each SEA administers grants to LEAs to "enable the lowest-achieving schools" to meet accountability requirements. In 2009 the U.S. Department of Education announced a dramatic increase in the funds that would be provided to SEAs under section 1003(g) while issuing program requirements that charged the SEAs with channeling the funds to LEAs for the "persistently lowest-achieving schools" to support rapid improvement through four intervention models:

- **Turnaround model**: The LEA replaces the principal and rehires no more than 50% of the staff; gives greater principal autonomy; implements other prescribed and recommended strategies.
- **Restart model**: The LEA converts or closes and reopens a school under a charter school operator, charter management organization, or education management organization.
- **School closure**: The LEA closes the school and enrolls the students in other schools in the LEA that are higher achieving.
- **Transformation model**: The LEA replaces the principal (except in specified situations); implements a rigorous staff evaluation and development system; institutes comprehensive instructional reform; increases learning time and applies community-oriented school strategies; and provides greater operational flexibility and support for the school.

Each SEA is directed to identify its "persistently lowest-achieving" schools (see Chapter 2). LEAs that include these schools then apply to the SEA to receive School Improvement Grants and determine which of the four models fits best in each of their lowest-achieving schools. While the LEAs must apply one of the four intervention models in schools defined as "persistently lowest-achieving," once the SEA has allocated resources for its "persistently lowest-achieving schools," according to the federal requirements, the SEA will use the remaining School Improvement Grant funds for LEAs to apply differentiated interventions and supports to improve other Title I schools in improvement, corrective action, or restructuring.

In identifying the lowest-achieving schools, the SEA arranges the schools into three tiers, each tier representing a level of priority for the SIG funds. In determining which applicant LEAs receive grants, the SEA takes into account the number of low-performing schools in the LEA, the tiers these schools occupy, and the LEA's capacity to

effectively implement the models and strategies outlined in the SIG application. The three tiers of schools identified as lowest achieving, in priority order for assistance through School Improvement Grants are:

Schools the LEA must identify:

Tier I: Title I schools in improvement, corrective action, or restructuring that are identified by the SEA as "persistently lowest-achieving."

Tier II: Secondary schools that are eligible for, but do not receive, Title I-Part A funds and are identified by the SEA as "persistently lowest-achieving."

Tier III: Title I schools in improvement, corrective action, or restructuring that are not Tier I schools.

Schools the LEA may identify:

Tier I: Title I eligible elementary schools that are no higher achieving than the highest-achieving school that meets the criteria of "persistently lowest-achieving schools" in the "must identify" category above and that are:

- in the bottom 20% of all schools in the State based on proficiency rates; or
- have not made AYP for two consecutive years.

Tier II: Title I eligible secondary schools that are (1) no higher achieving than the highest-achieving school that meets the criteria of "persistently lowest-achieving schools"in the "must identify" category above or (2) high schools that have had a graduation rate of less than 60 percent over a number of years and that are:

- in the bottom 20% of all schools in the State based on proficiency rates; or
- have not made AYP for two consecutive years.

Tier III: Title I eligible schools that do not meet the requirements to be in Tier I or Tier II and that are:

- in the bottom 20% of all schools in the State based on proficiency rates; or
- have not made AYP for two years.

Governance, Human Capital, and Effective Practice

Since 1994, the federal Elementary and Secondary Education Act (ESEA) has required states, as a condition of receiving federal dollars under this act, to maintain standards-based accountability systems and to provide statewide systems of support to assist LEAs and schools in meeting the accountability requirements. Under the 2001 reauthorization of ESEA (No Child Left Behind), sanctions were placed upon LEAs and schools not making adequate progress toward student achievement targets. After not making adequate yearly progress for five years, a school is subject to restructuring.

The experience with restructuring since 2002 provides a backdrop for the current School Improvement Grant program's sharp focus on persistently lowest-achieving schools and more substantial methods for positive change. For the 2007-08 school year, 3,500 schools—or 7% of all Title I schools—were in restructuring planning or implementation status (Center on Education Policy, 2008), and that number was escalating each year. A study by the Center on Education Policy (CEP, 2008) found that the "other" option for restructuring was chosen in 89% to 96% of the cases, state to state, in the five states studied.

An analysis of the CEP data and related studies and review of restructuring successes by the Center on Innovation & Improvement (Brinson & Rhim, 2009) concluded that:

- Few leaders of schools identified for restructuring were implementing significant changes to school governance and staffing as envisioned in NCLB (USDE, 2007);
- LEAs often choose the least prescriptive restructuring option; and
- All of the four most significant restructuring options are not available to schools.
  - In 10 states, charter conversion is not an option because charter schools are not allowed by state law. In many states that do have charter school laws, charter caps or other restrictions may limit conversion as a restructuring approach (Hassel, Hassel, Arkin, Kowal, & Steiner, 2006).
  - Some states have constitutions or laws forbidding state takeover. In other states, many top administrators believe that takeover would be a logistical quagmire (Steiner, 2006).
  - Contracting with an outside provider for many schools—especially small schools or geographically isolated schools—was difficult because contractors are simply not available or affordable.
  - Replacing some or all of the teachers and administrators met obstacles including the availability of leaders likely to obtain better results and high-quality teacher replacements (Kowal, 2009).

For these reasons, the U.S. Department of Education, through initiatives including those associated with the American Recovery and Reinvestment Act (ARRA), has urged changes in state statute and policy to allow for the adoption of intervention models such as those prescribed in the School Improvement Grant program. The *Handbook on Restructuring and Substantial School Improvement* (Walberg, 2007) also provides specific practices that must accompany structural changes in order to achieve restructuring's intended results.

The 2009 and 2010 School Improvement Grant programs strongly amplify the restructuring provisions of NCLB and commits a massive surge of funding to rid the nation of its persistently lowest-achieving schools. The SIG provisions make it clear that change must be dramatic, improvement rapid, and results significant. Moving beyond the restructuring provisions of NCLB, the SIG program:

- Considers student growth in determining school progress;
- Sharply focuses on the "persistently lowest-achieving schools;"
- Limits strategies employed under the transformation model to a defined and muscular set of effective practices;
- Stresses the importance of talent, the human capital necessary for rapid school improvement; and
- Requires changes in governance and leadership to pave the way for rapid and sustained improvement.

Part II of this *Handbook* provides action principles, resources, and references pertaining to the models, strategies, and practices recommended in the federal regulations for the School Improvement Grants. These models, strategies, and practices are organized into the following categories:

- Organizational Structures
- Leadership and Decision Making
- Human Capital (Personnel and Professional Development)
- Curriculum and Instruction
- Scheduling and Learning Time
- Student Supports

The School Improvement Grant program emphasizes changes in governance, structure, human capital, and practice in order to effect rapid and substantial improvement of persistently low-achieving schools. The models, strategies, and practices recommended in the program's regulation and guidance also provide a sound menu for reform and improvement of schools not covered by the provisions of these grants, and the Comprehensive Technical Assistance Centers encourage SEAs and LEAs to use this *Handbook* in their systems of support for the improvement of all schools.

References

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Identifying Local Education Agencies and Schools for School Improvement Grants

2

Assessment and Accountability Comprehensive Center

Focusing School Improvement Grants on Persistently Lowest-Achieving Schools

The 2009 and 2010 final regulations for School Improvement Grants (SIGs) established a clear goal for the use of the grants: to help in achieving the rapid improvement of schools that are persistently the lowest-achieving. State Education Agencies (SEAs) have the primary responsibility for establishing clear and consistent statewide processes for identifying Local Education Agencies (LEAs) for School Improvement Grants (SIGs). Their challenge is to apply identification criteria that will focus the grants on schools with the greatest need—schools with extremely low levels of student achievement over extended periods of time. This chapter will assist SEAs and LEAs in the process of identifying the schools best served by these grants.

Historical Background: NCLB Accountability Requirements

Under No Child Left Behind (NCLB), large numbers of schools nationwide have been identified as "in need of improvement." NCLB called for uniform statewide standards-based assessments and an accountability system that determined whether each Title I school made Adequate Yearly Progress (AYP). To measure the improvement of Title l schools, which serve large percentages of socio-economically disadvantaged students, SEAs were to establish targets requiring schools to increase annually the percentage of students reaching proficiency in English/language arts and mathematics.

Based on NCLB accountability provisions and prescribed sanctions, each state also established a Title l accountability system focusing on schools that were not making AYP and a set of requirements, increasing over time, for schools that did not increase student achievement sufficiently to meet the statewide targets.

A set of categories was established that identified both the length of time in years that a school had failed to meet the AYP targets, and the progressively intensive actions and interventions required of them to increase student achievement.

The categories of Title l schools failing to meet statewide accountability goals—"In School Improvement" are:

1. **Schools in Improvement** have failed to make AYP for two or three consecutive years (one year for planning, one year for implementation of improvement strategies);
2. **Schools in Corrective Action** have failed to make AYP for four consecutive years; and

3. **Schools in Restructuring** have failed to make AYP for five years, and have one year to plan and another year (year 7) to implement a major reform in school governance.

Starting in 2009, the School Improvement Grants focused funding and intensive improvement efforts on the least successful of Title l schools. It is not surprising to observe that achievement data typically identify the persistently lowest-achieving schools as among those currently in Corrective Action and in Restructuring—focusing specific attention on schools not making significant gains in student achievement over a number of years. The 2009 School Improvement Grants build on this historical categorization of schools with multiple years in "improvement" by carefully defining "persistently lowest-achieving schools" and by establishing categories (Tiers I, ll, and III) of schools in need of the fundamental, intensive reform efforts described in this *Handbook*.

Requirements for Defining and Identifying "Persistently Lowest-Achieving Schools"

As defined in Federal statute and regulation, a "persistently lowest-achieving school" is:

1. A Title I school in improvement, corrective action, or restructuring that—
   A. Is among the lowest-achieving five percent of Title I schools in improvement, corrective action, or restructuring or among the lowest-achieving five Title I schools in improvement, corrective action, or restructuring in the State, whichever number of schools is greater; or
   B. Is a high school that has had a graduation rate as defined in 34 CFR 200.19(b) that is less than 60% over a number of years.
2. A secondary school that is eligible for, but does not receive, Title I funds that—
   A. Is among the lowest-achieving five percent of secondary schools or among the lowest-achieving five secondary schools in the State that are eligible for, but do not receive, Title I funds, whichever number of schools is greater; or
   B. Is a high school that has had a graduation rate as defined in 34 CFR 200.19(b) that is less than 60% over a number of years.

Identifying Persistently Lowest-Achieving Schools

To identify the lowest-achieving schools, a State must take into account both—

- The academic achievement of the "all students" group in a school in terms of proficiency on the State's assessments under section 1111(b)(3) of the ESEA in reading/language arts and mathematics combined; and
- The school's lack of progress on those assessments over a number of years in the "all students" group.

The SIG regulations direct each SEA to identify the State's "persistently lowest-achieving" schools. LEAs then apply to the SEA to receive School Improvement Grants, committing to employ one of the four intervention models identified in the SIG regulations in Tier l and ll schools. (See below for definitions of Tier l, ll, and lll schools—differentiated categories of schools eligible for School Improvement Grants). (See http://www2.ed.gov/programs/sif/sigguidance11012010.pdf for Federal Guidance or the Appendix at the end of this book to see Federal Guidance A-15: "How can an SEA determine academic achievement in terms of proficiency of the 'all students' group on the State's reading/language arts and mathematics assessments combined to develop one list of schools that will enable it to identify the persistently lowest-achieving schools in the State?")

Key Considerations in Identifying Persistently Lowest-Achieving Schools: SEA Responsibilities

1. **SEA Responsibility: Establish and apply criteria and calculation formulas for identifying the lowest-achieving 5% of Title I schools not currently making AYP.**

   Initial Criterion—

   A. The Title l schools to be identified are not currently making AYP.

   B. And, Applying the Calculation Formula, either—

      B.1. Identify the lowest-achieving (5%) of all such Title l schools, ranking schools from highest to lowest using the current year ESEA standards-based assessment results, and establishing a cut score of percent proficient, below which a school is in the bottom 5%. (See Table 1: Steps to Identify "Persistently Lowest-Achieving" Schools at end of this chapter.)

      OR

      B.2. Identify the Title l high schools that have had a graduation rate as defined in 34 CFR 200.19(b) that is less than 60% over a number of years. All such Title l high schools are eligible for School Improvement Grants.

2. **SEA Responsibility: Establish and apply criteria and calculation formulas for identifying secondary schools eligible for, but not receiving, Title l funds, but that will be eligible for School Improvement Grants.**

   A. Identify secondary schools that are eligible for, but do not receive, Title I funds. From this group of schools, identify secondary schools that are among the lowest-achieving five percent of secondary schools.

      OR

   B. Identify secondary schools that are among the lowest-achieving five secondary schools in the state.

      OR

   C. Identify secondary schools that have had a graduation rate as defined in 34 CFR 200.19(b) that is less than 60% over a number of years.

All secondary schools meeting the criteria described in 2A, 2B, or 2C are eligible for School Improvement Grants.

3. **SEA Responsibility: Identify low-achieving schools that are not making significant student achievement gains and are among the persistently lowest-achieving.**

To determine persistently lowest-achievement levels in schools, compare the results of the above calculation for each Title l school over the years since it initially failed to meet the statewide AYP requirements and fell into "school improvement" status.

An SEA has discretion in how it determines whether a school has demonstrated a "lack of progress" on the State's assessments. See at the end of this chapter three examples of how an SEA can determine "lack of progress." An SEA may use other reasonable approaches.

4. **SEA Responsibility: Avoiding false category errors in identifying "persistently lowest-achieving schools."**

To avoid falsely categorizing any schools as persistently lowest-achieving, schools that have begun to make substantial progress in student achievement in the last year or two years and whose current improvement plans appear to be showing substantial positive results, the foregoing analysis (in #3 above) may point to a small number of low-achieving schools that may not be appropriately placed in the category of "persistently lowest-achieving schools."

Defining and Prioritizing Three Tiers of Schools Eligible for School Improvement Funds

In identifying the persistently lowest-achieving schools, the SEA categorizes the schools into three tiers, each tier defining a group of schools eligible for SIG funds. LEAs apply to the SEA for School Improvement Grants, giving first priority to their persistently lowest-achieving Tier I and II schools, followed by requests for additional funding for eligible Tier III schools. An LEA must demonstrate in its application its commitment and capacity to effectively implement in its Tier I and Tier II schools one of the rigorous interventions described in the regulations governing the School Improvement Grants.

The three tiers of schools identified as eligible for assistance through School Improvement Grants are:

- **Tier I:** Title I schools in improvement, corrective action, or restructuring that are identified by the SEA as "persistently lowest-achieving."
- **Tier II:** Secondary schools that are eligible for, but do not receive, Title I-Part A funds and are identified by the SEA as "persistently lowest-achieving."
- **Tier III:** Title I schools in improvement, corrective action, or restructuring that are not Tier I schools (not identified as persistently lowest-achieving schools). An SEA may establish additional criteria to encourage LEAs to differentiate among these schools in their use of school improvement funds and to use in setting priorities among LEA applications for funding.

Key Considerations in Defining and Prioritizing the Three Tiers of Schools in LEAs Eligible for School Improvement Grants

1. **Identifying LEAs Eligible for School Improvement Grants: Criteria**

   A. Greatest Need: An LEA with the greatest need for a School Improvement Grant must have one or more schools in one of the three tiers.

   B. Strongest Commitment: An LEA with the strongest commitment agrees to implement and demonstrates the capacity to implement fully and effectively one of the rigorous interventions identified in the SIG requirements in each Tier l and Tier ll school that the LEA commits to serve.

   Note: Criterion B (above) establishes that all Tier l and Tier ll schools have been identified by the SEA as persistently lowest-achieving schools. Tier l and Tier ll schools have first priority for School Improvement Grant funds.

2. **Identifying Tier III Schools for SIG Funding**

   Additional School Improvement Grant funds may be available to LEAs for Tier lll schools. The SEA should establish criteria that encourage LEAs in their SIG applications to establish funding priorities for their Tier lll schools and to differentiate among those schools in their appropriate use of school improvement funds.

Conclusion

Although this chapter of the *Handbook* focuses primarily on the identification of LEAs and schools for School Improvement Grant funding, these categories and criteria are of great importance as these requirements are built into each SEA's application criteria and fully incorporated into the grant applications submitted by each LEA. The success of this process will only become a reality as the appropriate intervention strategies for specific schools are identified and fully implemented, schools are turned around, and all students in all schools attain high levels of academic achievement.

The process described in this chapter contributes to the success of this grant program in essential ways:

- Initially, an intense focus on identifying and planning to improve the "persistently lowest-achieving schools" builds on the historical categories drawn from past efforts at reform: Schools in Improvement, in Corrective Action, and in Restructuring. Those categories are indicative of and combine both inadequate growth in student achievement over time with inadequate attempts to intervene effectively at the school level. Lessons learned from this history suggest the importance of intense efforts to employ a set of powerful reform strategies in every low-achieving school.
- Second, the focus of the School Improvement Grant program is not on all "improvement schools," but rather on a finite number of priority schools, 5% of the schools in improvement, that are to receive substantial funding and support in exchange for a commitment to use designated reform strategies to turn schools around and to make major student achievement gains in a very short span of time. The schools receiving SIGs are those with the greatest need and are expected to become models of successful intervention for the future.
- Third, the identification of three tiers of schools for the prioritization of funding and focused services allows a broad spectrum of low-achieving schools to receive the differentiated support they need—with the four key turnaround strategies available to all Tier I and II schools and with additional differentiated strategies available for schools (Tier III) not in the bottom 5%, but who have substantial needs for support if they are to increase the pace of student growth.

The schools identified for the School improvement Grants will benefit greatly from the combined efforts of SEAs and LEAs to identify them with great care and to choose from a variety of improvement strategies to provide local communities, parents, and students with schools of the highest quality meeting the needs of all of their students.

School Improvement Grant Resources

Online from the U. S. Department of Education

1. Elementary and Secondary Education Act of 1965, as amended, Title I, Part A, Section 1003(g) http://www.ed.gov/programs/sif/legislation.html
2. Guidance—School Improvement Grants—11/01/10 http://www2.ed.gov/programs/sif/legislation.html
3. School Improvement Fund: Applicant Information, including Final Requirements and SEA Application for School Improvement Grants http://www.ed.gov/programs/sif/applicant.html
4. Final Requirements, Federal Register, October 28, 2010. This document contains the final requirements governing the process that a State educational agency (SEA) uses to award school improvement funds authorized under section 1003 (g) of the Elementary and Secondary Education Act to local educational agencies (LEAs) in order to transform school culture and substantially raise the achievement of students attending the State's persistently lowest-achieving schools, including secondary schools. The official version will be posted in the U.S. Federal Register. http://www2.ed.gov/programs/sif/legislation.html

Table 1: Steps to Identify "Persistently Lowest-Achieving" Schools

The following steps provide an example of the process that an SEA might employ to identify Title l schools as "persistently lowest-achieving," as described above in 1.B.1.

Step 1: Determine all relevant definitions—*i.e.,* the definition of "secondary school," the definition of a "number of years" for purposes of determining whether a high school has a graduation rate less than 60%, and the definition of a "number of years" for purposes of determining "lack of progress" on the State's assessments.

Step 2: Determine the number of schools that make up five percent of schools in each of the relevant sets of schools *(i.e.*, five percent of Title I schools in improvement, corrective action, or restructuring and five percent of the secondary schools that are eligible for, but do not receive, Title I funds); determine whether that number or the number five should be used to determine the lowest-achieving schools in each relevant set of schools, depending on which number is larger.

Step 3: Determine the method for calculating combined English/language arts and mathematics proficiency rates for each school.

Step 4: Determine the method for determining "lack of progress" by the "all students" group on the State's assessments.

Step 5: Determine the weights to be assigned to academic achievement of the "all students" group and lack of progress on the State's assessments.

Step 6: Determine the weights to be assigned to elementary schools and secondary schools.

Step 7: Using the process identified in Step 3, rank the Title I schools in improvement, corrective action, or restructuring from highest to lowest based on the academic achievement of the "all students" group.

Step 8: Using the process identified in Step 4, as well as the relevant weights identified in Steps 5 and 6, apply the second factor—lack of progress—to the list identified in Step 7.

Step 9: After applying lack of progress, start with the school at the bottom of the list and count up to the relevant number determined in Step 2 to obtain the list of the lowest-achieving five percent (or five) Title I schools in improvement, corrective action, or restructuring.

Step 10: Identify the Title I high schools in improvement, corrective action, or restructuring that have had a graduation rate of less than 60% over a number of years (as defined in Step 1) that were not captured in the list of schools identified in Step 9.

Step 11: Add the high schools identified in Step 10 to the list of schools identified in Step 9.

Step 12: Using the process identified in Step 3, rank the secondary schools that are eligible for, but do not receive, Title I funds from highest to lowest based on the academic achievement of the "all students" group.

Step 13: Using the process identified in Step 4, as well as the relevant weights identified in Steps 5 and 6, apply the second factor—lack of progress—to the list identified in Step 12.

Step 14: After applying lack of progress, start with the school at the bottom of the list and count up to the relevant number determined in Step 2 to obtain the list of the lowest-achieving five percent (or five) secondary schools that are eligible for, but do not receive, Title I funds.

Step 15: Identify the high schools that are eligible for, but do not receive, Title I funds and that have had a graduation rate of less than 60% over a number of years (as defined in Step 1) that were not captured in the list of schools identified in Step 14.

Step 16: Add the high schools identified in Step 15 to the list of schools identified in Step 14.

As exemplified in the table below, together, the two lists of schools resulting from Steps 11 and 16 make up the State's persistently lowest-achieving schools. The list of schools resulting from Step 11 will constitute the Tier I schools and the list of schools resulting from Step 16 will constitute the Tier II schools for purposes of using SIG funds under section 1003(g) of the ESEA. Except for newly eligible schools the SEA may identify under the Consolidated Appropriations Act (2010), all Title I participating schools in improvement, corrective action, or restructuring that are not on the list resulting from Step 11 will constitute Tier III schools for purposes of using SIG funds under section 1003(g) of the ESEA.

List A: Resulting from Step 11 (Tier I)	List B: Resulting from Step 16 (Tier II)
Lowest-achieving five percent (or five) of Title I schools in improvement, corrective action, or restructuring, obtained by: ■ Ranking the Title I schools in improvement, corrective action, or restructuring from highest to lowest based on the academic achievement of the "all students" group; ■ Applying lack of progress to the rank order list; and ■ Counting up from the bottom of the list. Plus Title I high schools in improvement, corrective action, or restructuring that have had a graduation rate less than 60% over a number of years (to the extent not already included).	Lowest-achieving five percent (or five) of secondary schools that are eligible for, but do not receive, Title I funds, obtained by: ■ Ranking the secondary schools that are eligible for, but do not receive, Title I funds from highest to lowest based on the academic achievement of the "all students" group; ■ Applying lack of progress to the rank order list; and ■ Counting up from the bottom of the list. Plus High schools that are eligible for, but do not receive, Title I funds and that have had a graduation rate less than 60% over a number of years (to the extent not already included).

Examples of how an SEA can determine "lack of progress."

EXAMPLE 1

Lowest Achieving Over Multiple Years

An SEA repeats the steps in List A or List B for two previous years for each school. Then, it selects the five percent of schools with the lowest combined percent proficient or highest numerical rank based on three years of data to define the persistently lowest-achieving schools in the State.

This same methodology could also be applied using other numbers of years (e.g., two out of the last three years; three out of the last four years, etc.).

EXAMPLE 2

Lack of Specific Progress

An SEA establishes an amount of progress below which a school would be deemed to be demonstrating a "lack of progress." For example, an SEA might determine that a school has demonstrated a lack of progress on the State's assessments if its number of non-proficient students in the "all students" group in reading/language arts and mathematics combined has not decreased by at least 10% over the previous two (or three) years. The SEA would apply this standard to each school in its ranking until the SEA had identified the lowest-achieving five percent or lowest-achieving five schools in the State in each relevant set of schools. Under this example, there are only two options: a school makes progress, as defined by the SEA, or the school does not.

EXAMPLE 3

Lack of Relative Progress

An SEA repeats the steps in List A for the previous year (or other number of previous years, as the SEA determines appropriate) for each school in each set of schools and compares the results to the ranking obtained for the most recent year to obtain the difference, which determines the school's progress, or lack thereof. The SEA ranks those differences from highest to lowest. It then determines the lowest-achieving five percent or lowest-achieving five schools based on the combination of their percent proficient as well as their relative lack of progress. Under this example, two schools with similar proficiency percentages in the most recent year could rank differently depending on their relative amount of progress.

SIG Final Requirements

In its January 15, 2010 announcement, the Department of Education amended the SIG requirements to increase the amount of funding that may be allocated to a school and expanded the categories of schools that are eligible. A waiver is no longer required to serve secondary schools that are eligible for, but do not receive, Title I, Part A funds. In addition SIG eligibility is extended to elementary schools that are eligible for, but do not receive, Title I, Part A funds, and to Title I schools that are not in improvement, corrective action, or restructuring, as per the definitions below.

	Schools an SEA MUST identify in each tier	**Newly eligible schools an SEA MAY identify in each tier**
Tier I	Schools that meet the criteria in paragraph (a)(1) in the definition of "persistently lowest-achieving schools." See 1 below.	Title I eligible (see 2 below) elementary schools that are no higher achieving than the highest-achieving school that meets the criteria in paragraph (a)(1)(i) in the definition of "persistently lowest-achieving schools" and that are: ■ in the bottom 20% of all schools in the State based on proficiency rates; or ■ have not made AYP for two consecutive years.
Tier II	Schools that meet the criteria in paragraph (a)(2) in the definition of "persistently lowest-achieving schools." See 1 below.	Title I eligible secondary schools that are (1) no higher achieving than the highest-achieving school that meets the criteria in paragraph (a)(2)(i) in the definition of "persistently lowest-achieving schools" or (2) high schools that have had a graduation rate of less than 60 percent over a number of years and that are: ■ in the bottom 20% of all schools in the State based on proficiency rates; or ■ have not made AYP for two consecutive years.
Tier III	Title I schools in improvement, corrective action, or restructuring that are not in Tier I. See 3 below.	Title I eligible schools that do not meet the requirements to be in Tier I or Tier II and that are: ■ in the bottom 20% of all schools in the State based on proficiency rates; or ■ have not made AYP for two years.

1. "Persistently lowest-achieving schools" means, as determined by the State--

(a)(1) Any Title I school in improvement, corrective action, or restructuring that--

(i) Is among the lowest-achieving five percent of Title I schools in improvement, corrective action, or restructuring or the lowest-achieving five Title I schools in improvement, corrective action, or restructuring in the State, whichever number of schools is greater; or

(ii) Is a high school that has had a graduation rate as defined in 34 CFR 200.19(b) that is less than 60 percent over a number of years; and

(a)(2) Any secondary school that is eligible for, but does not receive, Title I funds that--

(i) Is among the lowest-achieving five percent of secondary schools or the lowest-achieving five secondary schools in the State that are eligible for, but do not receive, Title I funds, whichever number of schools is greater; or

(ii) Is a high school that has had a graduation rate as defined in 34 CFR 200.19(b) that is less than 60 percent over a number of years.

2. With respect to schools that may be added to Tier I, Tier II, or Tier III, "Title I eligible" schools may be schools that are eligible for, but do not receive, Title I, Part A funds or schools that are Title I participating (i.e., schools that are eligible for and do receive Title I, Part A funds).

3. Certain Title I schools in improvement, corrective action, or restructuring that are not in Tier I may be in Tier II rather than Tier III. In particular, Title I secondary schools in improvement, corrective action, or restructuring that are not in Tier I may be in Tier II if they meet the criteria in section I.A.1(b)(ii)(A)(2) and (B) of the interim final requirements and an SEA chooses to include them in Tier II.

Selecting Interventions, Differentiating Supports, and Monitoring Progress

3

Center on Innovation & Improvement

Once the SEA has identified the schools eligible for assistance from School Improvement Grants and has classified these schools according to the three tiers, the LEA must make critical decisions to determine which intervention model is most likely to result in success for each school. Also, and especially for Tier III schools, plans must be drawn for implementing the required strategies and for introducing additional practices suggested in the SIG regulations and guidance in order to address each school's specific needs. This chapter offers decision-making approaches for determining the best model fit for a school and for diagnosing needs to offer the most effective supports. Both the SEA and LEA bear responsibility for sound diagnosis and efficient delivery of supports and resources to ensure successful implementation. These diagnostic, intervention, and support mechanisms will have wider applicability in SEAs and LEAs as they provide systems of support for the improvement of all of their schools.

A system of support, whether provided by the SEA or LEA, functions to change the behaviors of practitioners and stakeholders in ways that produce better learning results for students. The *Handbook on Statewide Systems of Support* (Redding & Walberg, 2008) proffers a theory of change that is applicable to both LEA and SEA systems. This theory of change includes three levers by which a support system may effect change and encourage stronger educational practices: Incentives, Opportunity, and Capacity (Rhim, Hassel, & Redding, 2008). The *Handbook* emphasizes that the system (SEA or LEA) must apply the levers in the right balance, with consideration for each school's context and conditions. One lever alone, however, is likely to have limited impact, whereas the combination of the three produces a more robust foundation for improvement.

Building capacity for change is the lever with which educators are most familiar—providing resources and developing knowledge and skills, typically through training, professional development coaching, and consultation. While this approach is necessary, it is often not sufficient. Incentives add a catalyst and a motivational dimension, giving people a reason to change. Incentives include public disclosure of a school's performance, sanctions for inadequate performance, and rewards for adopting effective practices and demonstrating significant improvement. Incentives are offered for individuals (e.g., leaders, teachers, improvement coaches), groups (such as school teams), and organizations (school, LEA, external partner, for example). Even with attractive incentives, access to resources, and available training, progress may be less than hoped because people also need the opportunity to innovate, to break away from the system's own barriers and constraints. SEAs and LEAs enhance the opportunity for constructive change by vetting their own regulations to remove those that inhibit innovation,

granting waivers and exemptions, and allowing for fresh starts though charter schools and new school models. The School Improvement Grant program gives SEAs and LEAs a framework and resources to incentivize rapid improvement, build local capacity, and open new space for innovation.

Chapter 1 introduced the School Improvement Grant program's components, and Chapter 2 offered guidance for states on sorting schools into categories of performance. Within each category, the SEA and LEA differentiates its interventions and supports. In every state and in most districts, some schools are performing at high levels, and their accomplishments are to be rewarded, their practices studied, and their approaches disseminated as useful information for other LEAs and schools. Also in all states and most districts, some schools are making acceptable progress and continuing to improve. SEAs and LEAs can help these schools sustain and build upon their successes by providing them with strong data systems, diagnostic and planning tools, greater flexibility, access to a large pool of talent, and differentiated supports. Among those schools making inadequate progress and demonstrating unacceptable performance, some will qualify for School Improvement Grants. Others will benefit from the SEA's and LEA's expansion of SIG models, strategies, and practices to include them.

Selecting an Intervention Model

The School Improvement Grant directs LEAs to select for their Tier I and Tier II schools one of four intervention models:

- **Turnaround model:** The LEA replaces the principal (although the LEA may retain a recently hired principal where a turnaround, restart, or transformation was instituted in past two years) and rehiring no more than 50% of the staff; gives greater principal autonomy; implements other prescribed and recommended strategies;
- **Restart model:** The LEA converts or closes and reopens a school under a charter school operator, charter management organization, or education management organization;
- **School closure:** The LEA closes the school and enrolls the students in other schools in the LEA that are higher achieving; or
- **Transformation model:** The LEA replaces the principal (although the LEA may retain a recently hired principal where a turnaround, restart, or transformation was instituted in past two years); implements a rigorous staff evaluation and development system; rewards staff who increase student achievement and/or graduation rates and removes staff who have not improved after ample opportunity; institutes comprehensive instructional reform; increases learning time and applies community-oriented school strategies; and provides greater operational flexibility and support for the school.

For most schools eligible for School Improvement Grants, the persistence of their low achievement calls for dramatically new governance structures, human capital, decision-making mechanisms, and operational practices. Change of this magnitude and immediacy is most likely through:

- Turnaround (infusion of talent and change in decision making and operational practices); or
- Restart (change in governance and decision making, an infusion of talent, and change in operational practices).

When the school's context and conditions do not suggest that a turnaround or restart is possible, the transformation model pertains and brings with it change in decision making, strategic staff replacement, and substantial improvement of operational practices. When the LEA (in consultation with the SEA) determines that the students attending a persistently low-achieving school may be better served by attending other schools, and when turnaround, restart, and transformation do not offer the certain promise of rapid improvement, the school is a candidate for closure.

The Turnaround Model

Because the turnaround model relies principally upon an infusion of human capital, along with changes in decision making and operational practice, the following considerations must be taken into account in determining if turnaround is the best fit for a persistently low-achieving school:

1. How will the LEA select a new leader for the school, and what experience, training, and skills will the new leader be expected to possess?
2. How will the LEA assign effective teachers and leaders to the lowest achieving schools?
3. How will the LEA begin to develop a pipeline of effective teachers and leaders to work in turnaround schools?
4. How will staff replacement be executed—what is the process for determining which staff remains in the school and for selecting replacements?

5. How will the language in collective bargaining agreements be negotiated to ensure the most talented teachers and leaders remain in the school?
6. What supports will be provided to staff being assigned to other schools?
7. What are the budgetary implications of retaining surplus staff within the LEA if that is necessary?
8. What is the LEA's own capacity to execute and support a turnaround? What organizations are available to assist with the implementation of the turnaround model?
9. What changes in decision-making policies and mechanisms (including greater school-level flexibility in budgeting, staffing, and scheduling) must accompany the infusion of human capital?
10. What changes in operational practice must accompany the infusion of human capital, and how will these changes be brought about and sustained?

The Restart Model

1. Are there qualified charter management organizations (CMOs) or education management organizations (EMOs) willing to partner with the LEA to start a new school (or convert an existing school) in this location?
2. Will qualified community groups initiate a homegrown charter school? The LEA is best served by developing relationships with community groups to prepare them for operating charter schools.
3. Based on supply and capacity, which option is most likely to result in acceptable student growth for the student population to be served—homegrown charter school, CMO, or EMO?
4. How can statutory, policy, and collective bargaining language relevant to the school be negotiated to allow for closure of the school and restart?
5. How will support be provided to staff that are reassigned to other schools as a result of the restart?
6. What are the budgetary implications of retaining surplus staff within the LEA if that is necessary?
7. What is the LEA's own capacity to support the charter school with access to contractually specified district services and access to available funding?
8. How will the SEA assist with the restart?
9. What performance expectations will be contractually specified for the charter school, CMO, or EMO?
10. Is the LEA (or other authorizer) prepared to terminate the contract if performance expectations are not met?

The Transformation Model

1. How will the LEA select a new leader for the school, and what experience, training, and skills will the new leader be expected to possess?
2. How will the LEA enable the new leader to make strategic staff replacements?
3. What is the LEA's own capacity to support the transformation, including the implementation of required, recommended, and diagnostically determined strategies?
4. What changes in decision making policies and mechanisms (including greater school-level flexibility in budgeting, staffing, and scheduling) must accompany the transformation?
5. What changes in operational practice must accompany the transformation, and how will these changes be brought about and sustained?

School Closure Model

1. What are the metrics to identify schools to be closed?
2. What steps are in place to make certain closure decisions are based on tangible data and readily transparent to the local community?
3. How will the students and their families be supported by the LEA through the re-enrollment process?
4. Which higher-achieving schools have the capacity to receive students from the schools being considered for closure?
5. How will the receiving schools be staffed with quality staff to accommodate the increase in students?
6. How will current staff be reassigned—what is the process for determining which staff members are dismissed and which staff members are reassigned?
7. Does the statutory, policy, and collective bargaining context relevant to the school allow for removal of current staff?

8. What supports will be provided to recipient schools if current staff members are reassigned?
9. What safety and security considerations might be anticipated for students of the school to be closed and the receiving school(s)?
10. What are the budgetary implications of retaining surplus staff within the LEA if that is necessary?
11. How will the LEA track student progress in the recipient schools?
12. What is the impact of school closure to the school's neighborhood, enrollment area, or community?
13. How does school closure fit within the LEA's overall reform efforts?

Diagnosing Performance and Operations

In a restart, diagnosis of current performance and operations is largely a moot point. An examination of performance has already shown that the school is persistently low-achieving, and a new school is created to better serve the students. Similarly, when the school is slated for closure, a diagnostic review will obviously not inform its progress. However, for both restarts and closures, prior diagnostic data are valuable to the SEA and LEA for gaining a better understanding of the links between practice (operations) and performance that is useful in strengthening the SEA's and LEA's continuing reform efforts. For this reason, ongoing diagnostic programs should be in place in advance of the decision points for interventions, and the SEA and LEA should analyze this data even after the decision has been made for a restart or closure.

For turnarounds and transformations, diagnostic data about the school's past performance and operations is useful to the new leaders in making the changes necessary to improve performance. Also, continued and ongoing assessment of performance and operations provides a guide for changes in course to arrive at effective and efficient operations and rapid improvement in student learning. Similarly, the SEA and LEA can provide targeted supports for schools in Tier III and for other schools by implementing routine diagnostic processes.

Diagnostic processes include the following types:

1. Self-assessment to guide the school's leadership and teachers in making continuous improvement;
2. Coached self-assessment—self-assessment with the consultation of an external consultant selected by the school or provided by the LEA or SEA; and
3. External review by a trained team of on-site observers.

With all three types of diagnosis, student learning data and operational data about the prevailing practices in the school inform the conclusions drawn and the recommendations made for improvement. Student learning data includes both formative data (classroom assessments, benchmark assessments, periodic assessments) and summative data (annual state standards assessments and achievement tests). Operational data is tied to indicators of effective practice and is gleaned from classroom observations, document review, interviews with leaders and teachers, focus groups, and surveys.

Some states and LEAs have adopted standards and indicators for effective school operations or for school improvement. Useful indicators are clearly tied to an evidence base; written in clear, jargon-free language; stated in behavioral terms; and particular to the person, persons, or teams responsible. The indicators may be so specific as to be determined with a simple Yes/No response or may be accompanied by rubrics and examples of evidence.

The Center on Innovation & Improvement's *Handbook on Statewide Systems of Support* (Redding & Walberg, 2008) includes the following categories of LEA and school functions that lend themselves to a diagnostic review. Standards and indicators may be aligned with these topics.

Leadership and Decision Making

- Allocation of resources to address learning goals
- Decision-making structures and processes
- Information and data systems

Curriculum and Instruction

- Alignment of curriculum, instruction, and assessment with standards
- Curriculum—description, scope, focus, articulation, organization
- Formative and periodic assessment of student learning
- Instructional delivery (teaching and classroom management)
- Instructional planning by teachers
- Instructional time and scheduling

Human Capital (Personnel)

- Performance incentives for personnel
- Personnel policies and procedures (hiring, placing, evaluating, promoting, retaining, replacing)
- Professional development processes and procedures

Student Support

- Programs and services for English language learners
- Extended learning time (supplemental educational services, after-school programs, summer school, for example)
- Parental involvement, communication, and options
- Special education programs and procedures
- Student support services (tutoring, counseling, placement, for example)

The type of diagnostic process varies according to the school's level of performance and trajectory of improvement. Figure 1—Classifying Schools by Performance (Student Growth) and Trajectory of Improvement—provides a graphic illustration of categories within which different diagnostic processes may be applied.

For all schools, the SEA and LEA should provide access to timely data and information on school improvement that will enable the school to make informed decisions in its continuous improvement. The SEA and LEA may also provide planning tools and standards and indicators of effective practice. Diagnostic and improvement planning should be relevant to the school's level and trajectory of performance, as follows:

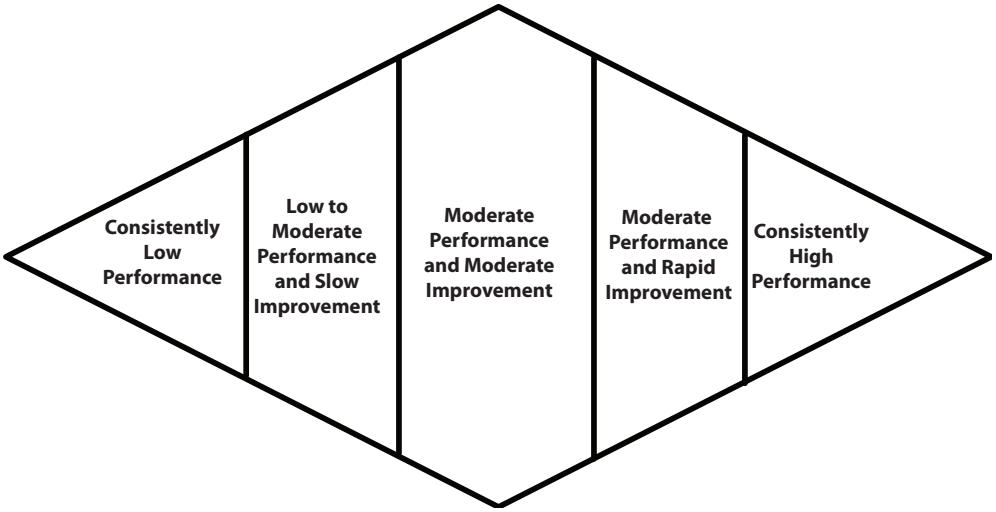
- Schools demonstrating moderate performance/rapid improvement and schools showing consistently high performance will typically be able to apply the SEA and LEA-provided tools, data, and information to their own advantage and will access the resources and supports required for their continued growth.
- Schools demonstrating moderate performance/moderate improvement will benefit from coached self-assessment, applying the SEA and LEA-provided tools, data, and information with the guidance of an external consultant.
- For schools demonstrating low to moderate performance/slow improvement, coached self-assessment may be supplemented by external reviews to provide an objective view of their operations and recommend improvements.
- Schools showing consistently low performance are candidates for intervention, and external review is useful in determining the appropriate intervention model and for informing the SEA and LEA about conditions and practices prevalent in these schools in order to strengthen their reform efforts.

Please see the Appendix for indicators of effective practice developed by the Center on Innovation & Improvement and high school indicators developed by the National High School Center.

Differentiating Supports

For persistently low-achieving schools, selection of the appropriate intervention model is itself a form of differentiation. For all schools, diagnostic processes should be linked with targeted resources and supports to address diagnosed areas in need of improvement.

Figure 1: Classifying Schools by Performance (Student Growth) and Trajectory of Improvement



The intentional alignment of diagnosis, improvement plan, and service plan is critical, with the service plan including the resources and supports provided by the SEA, LEA, and external providers. The Center on Innovation & Improvement's *Framework for an Effective Statewide System of Support* (Redding, 2009) offers the following cycle for improvement (Figure 2: Improvement Cycle) that illustrates the relationships among identification, diagnosis, planning, support, and progress monitoring. This cycle is applicable to both SEA and LEA supports for schools.

Support services may include consultation, training, professional development, coaching, and contracting for the provision of particular components of the school's operation. Efficient and effective provision of support services is ensured with intentional alignment to diagnosed operational need. The SEA and LEA may provide schools with lists of approved service providers, with the services aligned with standards and indicators included in the diagnostic and planning tools.

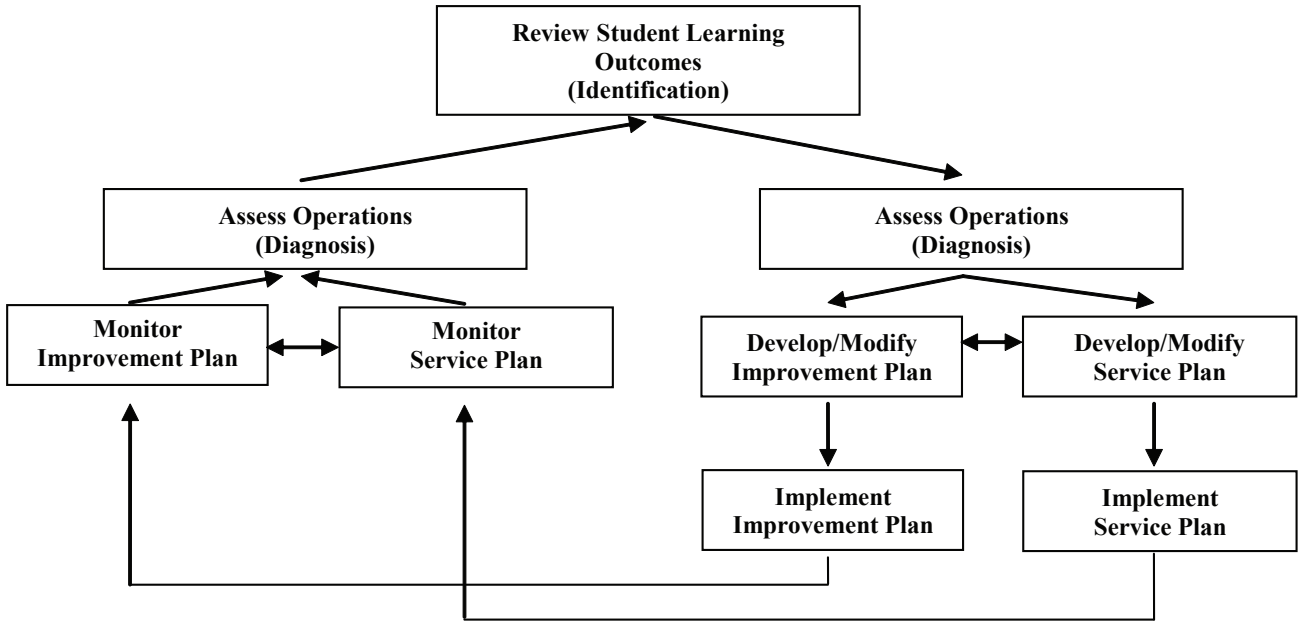
Monitoring Progress and Evaluating Results

The SEA and LEA will monitor progress of the schools receiving School Improvement Grants, and if the monitoring is thoughtfully designed, the data collected and the analysis applied will also yield important information about the effectiveness of models, providers, and particular strategies. The schools receiving School Improvement Grants and employing one of the four intervention models for rapid improvement create a natural laboratory within which a variety of hypotheses can be tested, and from which lessons will be learned that may be applied for the improvement of all schools, and especially for turning around low-achieving schools. For this reason, it is necessary for SEAs and LEAs to put in place systems for collecting data from the beginning of the grants' implementation, a design for analyzing the data, and a plan to disseminate the lessons learned. The SEA and LEA may require resources to engage consultants in both the design phase and in the implementation of the studies and their dissemination.

The School Improvement Grant program is premised upon three primary assumptions:

1. Low-achieving schools can be categorized into three tiers based on available data, and interventions and supports (including funding) can vary according to the tier;
2. A low-achieving school can be rapidly improved (within three years) through one of three intervention models: Turnaround, Restart, or Transformation; and
3. Some schools will not demonstrate a reasonable expectation of adequately responding to one of the three aforementioned intervention models, and their students will benefit from a fourth

Figure 2: Improvement Cycle



intervention model—the school's closure and the students' placement in higher-achieving schools.

Within each of the four intervention models (Turnaround, Restart, Transformation, and Closure), great variety will be displayed in the mix of external partners employed, the leadership applied, and the strategies implemented. This variety lends itself to systematic analysis of the relationship between the actions taken and the results achieved. For this analysis:

1. Cost-benefit ratios of various approaches should be taken into account;
2. Quantitative data must be accompanied by in-depth, on-site case studies of a sample of schools;
3. Reports generated from the studies should:
   a. include practical and procedural guidance,
   b. be presented in plain language for practitioners and policy makers, and
   c. be accompanied by trainings and forums to enhance their adoption.
4. Schools not receiving School Improvement Grants that demonstrate a turnaround, by the same definition applied to the SIG recipients, should also be studied and included in the reports.
5. Studies should continue beyond the time of the turnaround attempt (typically three years) to determine the relative sustainability of the interventions and strategies employed.

Data Collection and Analysis

Data collection and analysis should include, but not be limited to, an examination of the following questions:

A. School Context and Selection/Implementation of an Intervention

1. What were the school's prior context, student demographics, and performance?
2. What changed in terms of student demographics and enrollment with the onset of the intervention?
3. Which intervention model was employed?
4. What factors were considered in selecting the intervention model and who was involved in making the decision?
5. Which external partners were engaged, and what was the role and extent of involvement of each?
6. What level of funding was available, both in terms of the school's standard operational budget and the additional funds provided for purposes of the intervention, and how was the funding allocated?
7. What is the theory of action (or theory of change) for the intervention, as expressed by the district itself (turnarounds and transformations) or the lead agency (restarts)?
8. What new flexibility in staffing, scheduling, and budgeting was granted the school leaders?
9. How did the district support the intervention, the school leaders, and the school staff?
10. How did the state support the intervention, the school leaders, and the school staff?
11. How did the community support the intervention, the school leaders, and the school staff?

B. School Closures and Staff Dismissals and Reassignments

In School Closures:

1. In which higher-achieving schools were the students enrolled, and how did the influx of students affect these schools?
2. How were the receiving schools staffed to accommodate the influx of students?
3. What support did the district and state provide the receiving schools?
4. How did the students enrolled in the closed school fare in the receiving schools?
5. What were the consequences of school closure to the school's neighborhood, enrollment area, or community?
6. How were the students and their families supported by the LEA through the re-enrollment process?

In School Closures and in Other Interventions that Required Staff Dismissal or Reassignment:

1. How many and which staff were dismissed, reassigned?
2. What was the process for determining which staff was dismissed and which staff was reassigned?
3. How did the statutory, policy, and collective bargaining context relevant to the school affect removal or reassignment of current staff?

4. What were the consequences to recipient schools where staff was reassigned?
5. What were the budgetary burdens of retaining surplus staff within the LEA if that was necessary?

C. Leadership and Decision Making (Interventions other than closure)

1. What leadership changes were made, what factors were considered in selecting new leaders, and what background did the new leaders possess?
2. How were the school's governance and decision-making structures changed?
3. How were teams organized, purposed, scheduled, and supervised?
4. How were resources allocated to address learning goals?
5. What decision-making structures, including team responsibilities, were established?
6. What data, management, and information systems were employed?

D. Curriculum and Instruction (Interventions other than closure)

1. How were students enrolled or placed in program areas, curricula, or small schools?
2. How were curriculum, instruction, and assessment aligned with standards?
3. What was the curriculum—description, scope, focus, articulation, organization?
4. What formative and periodic assessments of student learning were utilized?
5. What was the nature and quality of instructional delivery (teaching and classroom management)?
6. How was instruction differentiated for students?
7. How was instructional planning by teachers (individual and team) conducted—structures, time, expectations, work products?
8. How much instructional time was provided and how was it organized—school year, school day, and periods within the day?

E. Human Capital (Interventions other than closure)

1. What, if any, performance incentives were provided for personnel?
2. What were the personnel policies and procedures (hiring, placing, evaluating, promoting, retaining, replacing)?
3. What were the professional development processes and procedures?
4. What professional development was provided?

F. Student Support (Interventions other than closure)

1. What programs and services were provided for English language learners?
2. How was extended learning time provided (supplemental educational services, after-school programs, summer school, for example)?
3. What was the nature and quality of parental involvement, school-home communication, and parent options?
4. What programs, services, and procedures were provided for students with disabilities?
5. What student support services were provided (tutoring, counseling, placement, for example)?
6. How were social and emotional learning, school climate, and discipline addressed—what were the policies, practices, and procedures?
7. What community-oriented school programs and practices were utilized?

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Part II: Implementing Improvement Strategies

4

Organizational Structures: Introduction

Center on Innovation & Improvement

Organizational structure is the framework within which decisions are made and executed, lines of authority are defined, communication is channeled, and institutional intent is made graphic. Designing or changing organizational structure is typically the opening act when an SEA or LEA tackles the challenge of persistently low-achieving schools. Not only do the schools require structural change (or reinvention), but the SEA and the LEA must alter the way they are organized in order to initiate and manage the interventions applied in these schools.

This chapter provides explanations, references, and resources for new organizational structures at the SEA and LEA levels, creation of turnaround offices, as well as new ways in which schools are organized in keeping with the provisions of the SIG program—establishing new school models, restarting with a charter school, restarting with an education management organization, and establishing community-oriented schools. In addition, this chapter addresses the ultimate organizational change—school closure.

Because high schools are typically large, organizationally complex, multi-faceted, and inclined toward inertia, this chapter deals specifically with a variety of ways to re-organize and re-program high schools: dual enrollment, learning academies, credit-recovery programs, re-engagement programs, and smaller learning communities.

Student learning is most strongly attributable to "proximal variables"—the influences closest to the student, such as the teacher's instructional practices and classroom management, the curriculum, the peer group, and teacher-student interactions. Organizational structure is not a proximal variable, but is a pre-condition for improving proximal variables and for sustaining the improvements.

Organizational structure signals how authority and accountability are distributed within a system of education, from SEA to LEA to school to classroom. The clear message of the SIG program is that both accountability and authority reside close to where the proximal variables for learning reside—in the classroom and in the school. The SIG program calls for greater school-level flexibility in staffing, scheduling, and budgeting; at the same time it encourages strong school-level accountability for results. Organizational structures within the SEA, LEA, and school (including those of the bodies governing the school) matter greatly in properly apportioning accountability and authority, which together create a focal point of responsibility for the learning success of each student.

Just as organizational structure can facilitate or obstruct constructive decision making and actions in the school and classroom, changes in organizational structure do not automatically lead to better learning outcomes for students. Again, a change in organizational structure is a pre-condition to improved learning but does not, itself,

produce the desired results. Operational changes must follow structural change. People must act with greater competence and with greater devotion to the job at hand. Much of the rest of this *Handbook* deals with the practices internal to a school that are linked to improved student learning. This chapter introduces several organizational structures that the SIG program proposes as likely pre-conditions to rapid school improvement.

Creating a Turnaround Office

Center on Innovation & Improvement

Emerging research indicates that states and districts are well positioned to take a lead role in enabling, driving, supporting, and sustaining school turnaround efforts through the creation of a designated turnaround office (Mass Insight Education 2007; 2009). Whether developed at the state or district level, a turnaround office should provide concentrated and coherent resources and expertise to priority schools identified due to chronic low performance. A turnaround office clusters together staff with turnaround expertise to focus their work on a set of schools included in a "zone" because they are engaged in intentional and substantial interventions to reverse their persistent low achievement. The turnaround office supports the interventions and the schools and external partners engaged in them. While the turnaround office enables the state or district to address the particular contexts and conditions of persistently low-achieving schools with strategies that are unique to rapid improvement, the offices should be connected conceptually and operationally with other state and district improvement efforts. In other words, the turnaround office provides a unique and specialized service within a coherent system of support that provides differentiated services appropriate to each school.

Examples of state turnaround offices are currently operating in Louisiana and Texas. Examples of district turnaround offices are those operating in Charlotte-Mecklenburg, Chicago, New York City, and Philadelphia. A core principle driving creation of a turnaround office is that schools assigned to the office are treated differently than other schools. For instance, they may be given additional flexibility, released from collective bargaining agreements, and assigned additional resources. They are treated differently because they are identified as a priority for the state due to their chronic low performance.

Designated turnaround offices can provide the conditions (changes in rules and resource allocation) and capacity (identifying high-quality staff and external partners) for rapid school improvement to take place, all the while communicating a single-minded focus on improving student learning. Additionally, they are positioned to effectively build parent and community support, contract with external partners, monitor fidelity of plan implementation and progress, build leadership capacity, problem solve, and maintain coordination and communication. It may also be necessary for turnaround offices to intervene if improvement efforts are unsuccessful. By design, the turnaround office functions as the lead entity driving dramatic school improvement efforts, rather than simply a compliance monitor (Redding & Walberg, 2008).

While a district turnaround office is applicable primarily in large districts with mutiple schools engaging in turnaround efforts, a small district can adopt a turnaround philosophy and define roles accordingly. A recent case study (Lane, 2009) of a rural Kansas district with fewer than 300 students illustrates this point. The superintendent redefined roles, focus, and relationships with school staff by more directly monitoring classroom instruction through use of observation protocols, by setting non-negotiable expectations and objectives, and giving teachers the autonomy to find ways to meet those objectives (Lane, 2009). In a state or larger district, creating a turnaround office could involve designating one or more staff members to coordinate the SIG improvement efforts. Discussions of how larger districts, such as Chicago, New York City, and Charlotte-Mecklenburg, restructured to support turnarounds may be found in Mass Insight (2007), the Mass Insight Resource Center and The Center for Comprehensive School Reform and Improvement (2009), and Lane (2009). When many schools in a district or a state require restructuring, establish clusters of no more than 8-10 schools, each of which is led by a strong partner whose job is to build school capacity, manage the turnaround efforts, and monitor implementation (Mass Insight, 2007; 2009). The clusters operate within partnership zones, which function as districts-within-a-district. These partnership zones have flexibility in operating conditions and strong partnerships among the schools, the district, the SEA, and any external partners. A critical aspect of establishing turnaround offices is clear expectations related to academic growth in a compressed period reflecting the high priority nature of the schools identified for rapid improvement.

Each school, district, and SEA is part of a system that requires coherence among its component parts to function optimally (Redding, 2006), so the turnaround office should not be an add-on or a stand-alone operation. Rather,

it should function in concert with other parts of the state and district administration. At the state level, this means being an integral part of the statewide system of support for districts and schools (Redding & Walberg, 2008).

Action Principles

For States Creating a State-Level Turnaround Office

1. Create a designated school turnaround office charged with directing statewide turnaround efforts (e.g., Louisiana Recovery School District).
2. Assign senior staff and required resources to direct and coordinate the state's role in school turnaround efforts.
3. Pursue needed policy changes to give districts and schools needed freedom and flexibility to implement their turnaround strategies.
4. Identify schools to receive targeted turnaround interventions.
5. Develop strategies related to specific turnaround options (e.g., turnaround, restart, or transformation).
6. Devise procedures for determining which strategy to pursue at each identified school.
7. Integrate support to districts and schools receiving School Improvement Grants into the existing statewide system of support to maximize resources and reduce duplication of effort.
8. Develop explicit goals for schools and means of holding schools or external providers working with schools accountable for measurable progress.
9. Establish partnerships with external providers where appropriate.
10. Establish regular communication with districts and schools engaged in the turnaround process.
11. Hold schools accountable for short-term progress leading to long-term academic gains.

For States Supporting Creation of District-Level Turnaround Offices

1. Identify and address barriers to creating a district-level turnaround office.
2. Prioritize resources to district-level turnaround offices demonstrating commitment and capacity to school turnaround efforts.
3. Develop guidance related to turnaround options (e.g., turnaround, restart, or transformation).
4. Provide support as needed to district-level turnaround offices.

For Districts Creating a District-Level Turnaround Office

1. Create a designated school turnaround office charged with directing statewide turnaround efforts.
2. Appoint senior leadership to direct and coordinate district's turnaround efforts.
3. Allocate resources to support turnaround office.
4. Develop strategies related to specific turnaround options (e.g., turnaround, restart, or transformation).
5. Pursue changes to formal policy and informal standard operating procedures to empower schools to implement their turnaround strategies.
6. Identify schools to receive targeted turnaround interventions.
7. Devise procedures for determining which strategy to pursue at each identified school.
8. Provide schools "the appropriate operating flexibility, resources, and support required to reduce barriers and overly burdensome compliance requirements and to enable a school-wide focus on student needs and improved achievement" (Mass Insight, 2009).
9. Establish partnerships with external providers where appropriate.
10. Establish mechanisms for keeping stakeholders informed about the turnaround process at each school.

11. Establish regular communication with districts and schools engaged in the turnaround process.
12. Hold schools accountable for short-term progress leading to long-term academic gains.

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Implementing New School Models

Center on Innovation & Improvement

An effective system of support addresses three key components of constructive change: incentives, capacity, and opportunity (Rhim, Hassel, & Redding, 2008). Incentives are inducements or motivators that encourage change, and capacity is the ability of the district and school to respond to incentives in constructive ways that improve outcomes. States and districts also need to extend the opportunity to change by providing space for new schools to be created and new ideas given wings. Examples of opportunities that allow for the introduction of new school models are strong charter school laws and state procurement policies that permit districts to hire external providers—such as education management organizations or charter management organizations—with proven track records to transform chronically low-performing schools. Examples of new school models include the Academy for Urban School Leadership, Achievement First, Expeditionary Learning Schools Outward Bound, and Green Dot Schools. Schools adopting new models will require autonomy (opportunity) to implement innovative learning environments while being held accountable for performance through renewable contracts. School options are wide-ranging and include variations such as global citizenship, entrepreneurship, talent, and gender-specific schools. Other new school model options, such as dual language academies, respond to the specific need for enhancing student outcomes for second language populations. Adoption of proven new school models is a key component of the Renaissance 2010 initiative in Chicago. Research to date indicates that some Renaissance 2010 schools are performing on par, others are lagging slightly, and some are performing slightly ahead of their counterpart schools (Akitunde, 2009). In other words, although there is not evidence of universal success, the schools are on a growth trajectory that appears to indicate movement in the right direction, and they are providing the district with a laboratory to test established whole school models as well as develop new ones. The lessons learned from the opportunity to implement new school models inform school improvement efforts across the district. The Center on Reinventing Public Education recently released a new report exploring adoption of multiple new school models as a strategy to drive district-wide school transformation and the link supplied below provides more information.

Effectively adopting new school models involves a rigorous selection process and key autonomies. A benefit of school models is that they incorporate an establish structure and control of the multitude of variables at play in a school by reducing the range of possible ways of doing things to a focused core, establishing coherence and order in a school (Redding, 2006). It is not difficult to describe an effective school or to envision space for a new school. The problem lies in the successful implementation and in maintaining the integrity of the model. Careful implementation planning is the key to success, and faulty planning is the road to failure. The failure of a school reform model to deliver the expected results can be attributed to three causes, or a combination of the three: a) the prescribed practices are not sufficiently powerful to improve student achievement; b) the practices are not organized and presented in a manner that makes successful implementation likely; and c) the practices are not implemented well (Leithwood, Jantzi, & Mascall, 2002).

Action Principles

For State

1. Revise policy and/or legislation to remove barriers that would discourage space for new schools and decrease the amount of time it takes to convert/close a school.
2. Provide autonomy for schools to operate more independently, such as with fewer duplicative reporting requirements.

For District

1. Develop a rigorous application review and selection process to identify promising or established new school models.
2. Include district teams in thorough review of potential models.
3. Develop a long-term plan to recruit and train school leaders.

4. Craft key relationship terms with new school operators to make certain they can be held accountable for key performance goals.

For School

1. Carefully craft the vision for adopting a new school model and make the case for why its approaches will produce the desired results.
2. Tend to the details of implementation by setting implementation goals, including improvement targets and timelines. Focus on closing the achievement gap and improving the learning of all students.
3. Provide broad-based orientation and professional development so that staff at all levels are fully aware of the needs and potential of the new school model.
4. Recruit a critical mass of committed support for the new school plan among key stakeholders such as parents, community organizations, local businesses, and the philanthropic community.
5. Cultivate support for the establishment of a positive learning culture among staff hired to work in the new school.
6. Develop a clear plan of action and adhere closely to the integrity of the chosen program to maintain fidelity of implementation.
7. Set goals for significant improvement by students including those who have previously failed.

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Restarting with a Charter School

Center on Innovation & Improvement

Converting schools to charter status can be an effective component of a district's portfolio of strategies for improving persistently low-achieving schools (Lake & Hill, 2009). Restarting a school as a charter school involves converting or closing an existing school and then reopening the school as a charter school. State charter school laws outline the parameters of charter school policy and practice. Depending on the relevant state charter statute, one of multiple entities (e.g., local education agencies, state education agencies, colleges and universities, mayors, appointed charter boards, and non-profits) may authorize charter schools. Consequently, the district's role related to restarting with a charter school may be as an authorizer or as a partner working closely with an alternative charter school authorizer. Factors influencing a district's ability to use the restarting with a charter school strategy include entities authorized to approve charter schools, the legal status of charter schools as independent single school districts or as part of an existing district, and the role of charter school governing boards.

Restarting with a charter school requires that district leaders, including the local school board, exercise leadership in developing, supporting, monitoring, and in some cases, approving charter schools. Research on charter school effectiveness and the experience of districts that have authorized charter schools highlights three key factors that contribute to the successful use of charter schools as an improvement strategy:

1. District leaders attend to system-level governance, including the capacity of the district to serve as a charter authorizer (CCSRI, 2009).
2. Districts articulate a clear legal relationship and a corresponding set of expectations that define the relationship between the district and the charter school, including the development of a performance-based contract that delineates the autonomy to be provided to charter schools and how schools will be held accountable (Kowal & Hassel, 2009).
3. District leaders support charter schools in accessing resources, space, and high-quality leadership and staff to meet the needs of all students (CCSRI, 2009).

State law determines the role that districts may play in authorizing and operating charter schools. In many states, state charter law allows districts to directly authorize new charter schools. District authorizers may allow charter school governing boards to operate single schools or contract with external charter management organizations (CMOs) to operate networks of schools within the district. A key success factor is the district's ability to identify and select high-quality charter school operators and to authorize and monitor charter school governing boards (CCSRI, 2009). For instance, a number of large urban districts have developed within-district "charter school offices" responsible for the administration of district charters, often as part of a portfolio approach to improving schools (Lake & Hill, 2009). Regardless of how a district chooses to authorize or manage its charter schools, research highlights the importance of a rigorous selection process that is fair, that identifies charter school developers with a research-based and proven approach to instruction, and that identifies school developers that have a solid business plan (CCSRI, 2009). The Comprehensive School Reform Quality Center and the Finance Project (2006) provide criteria for assessing a prospective contractor's organizational and financial ability to perform the necessary work. Haft (2009) and the National Association of Charter School Authorizers (2009) discuss the key components of a rigorous application process and what a good contract should contain. Charter school contracts will vary according to state charter school law, but samples and links to samples at Arizona State Board for Charter Schools (n.d.) and U.S. Charter Schools (n.d.) can prove helpful.

Defining expectations and relationships among the district, the charter school governance board, and individual charter schools is critical to the success of charter schools as an improvement strategy. Kowal & Hassel (2009) frame the district/charter school relationship in terms of autonomy, accountability, and resources. Autonomy over personnel decisions, resource management, and educational programs provides the flexibility needed to engage in dramatic improvement efforts. Clearly articulated outcomes based on student achievement and other measures of a school's health (e.g., fiscal, safety, leadership stability) are used to benchmark and hold

newly formed charter schools accountable for results. Large urban districts, such as Chicago, Philadelphia, and Baltimore, are using performance-based contracts to formalize a relationship between the district office and charter governing boards and CMOs that promotes dramatic improvement.

Charter school founders are often faced with difficulties in securing capital financing or finding a location for the charter school and in hiring top-quality leaders and teachers. Districts experienced in supporting charter schools as an improvement strategy have found it useful to actively support newly formed charter schools with securing space and hiring staff (for instance, Chicago's Renaissance 2010). Also, research shows that effective charter school leadership is a crucial factor in the success of newly formed charter schools (CCSRI, 2009).

Action Principles

For State

1. Address policy barriers inhibiting growth of charter schools (i.e., charter caps that limit growth and expansion, inequitable funding systems, and facilities financing challenges).
2. Draft model authorizer policies and procedures.
3. Develop model charter contracts.

For District

Attend to System-Level Governance

1. Develop the capacity (internally or externally) to effectively identify, select, and monitor charter school operators. Example: Chicago's Renaissance 2010 initiative and the Office of New Schools (http://www.ren2010.cps.k12.il.us/).
2. Engage parents and community members to discuss the charter school option, including the parameters of converting a school to charter status.
3. Research and prioritize charter management organizations (CMOs) that may address district needs.
4. Develop and use a rigorous selection process to identify charter school applicants.
5. Develop a databank of individuals interested in serving on charter school boards.

Articulate Legal Relationship (Autonomy, Accountability, Resources)

1. Engage stakeholder groups to identify the right mix of autonomy and flexibility to be provided to prospective charter schools and to gain support for the charter school option.
2. Clearly articulate the autonomy to be provided to newly formed charter schools.
3. Develop a set of non-negotiable performance benchmarks to serve as the basis for holding charter schools accountable.
4. Allow charter schools to propose school-based performance benchmarks to supplement district and state required performance benchmarks.
5. Develop a template for performance-based contracting.
6. Outline clear and enforceable consequences for failing to meet goals (e.g., revoke or modify charter, replace management organization).

Develop Mechanisms to Support Newly Formed Charter Schools

1. Support schools with finding sites and funding for startups.
2. Cultivate a pipeline of charter governing board members and charter school leaders.
3. Empower teachers to overcome resistance to the strategy.

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Restarting with an Education Management Organization

Center on Innovation & Improvement

Education management organizations (EMOs) are for-profit or non-profit organizations that manage public schools (Kowal & Arkin, 2005; Molnar et al., 2009). In contrast to traditional vendors that are contracted to provide specific services (e.g., professional development, payroll, food services) to districts and schools, EMOs are contracted by districts to manage and run individual schools, both traditional as well as charter schools, or clusters of schools. EMOs that manage networks of charter schools are referred to as charter management organizations (CMOs). The parameters of an EMO's management responsibility are spelled out in a performance contract between the district and an EMO. Similar to restarting with a charter, restarting with an EMO can be an effective component of a district's portfolio of strategies for improving persistently low-achieving schools (Lake & Hill, 2009).

The landscape of EMOs has expanded rapidly over the past 15 years. According to the Education Public Interest Center, which has tracked the development of EMOs over the past decade, the number of for-profit EMOs expanded from 21 to 95 between 2000 and 2009 (Molnar et al., 2009). Similarly, the number of non-profit EMOs expanded from 65 to 103 between 2000 and 2009 (Miron & Urschel, 2009). Together, for-profit and non-profit EMOs currently manage over 1300 schools in 32 states (Molnar et al. 2009; Miron & Urschel, 2009). The 20 largest EMOs (e.g., the 13 largest non-profit EMOs and the seven largest for-profit EMOs) together manage approximately two-thirds of all schools managed by EMOs throughout the nation. Currently, over 90% of EMO-managed schools are charter schools (Molnar et al., 2009).

EMOs vary in terms of their focus, size, and overall capacity to manage significant numbers of schools. Some EMOs work in multiple districts and manage schools across the nation, such as the 20 largest EMOs. A growing number of small to mid-size EMOs work in regions, single states, or in a single district intentionally focusing their efforts on a particular niche, mission, or student population. Given that EMOs are an emerging type of service provider with varied capacity to manage schools, states and districts interested in contracting with EMOs to dramatically improve schools need to conduct rigorous due diligence to verify capacity and ensure that the services provided reflect those required.

Restarting with an EMO involves converting a school or closing a school and reopening the school under the control of an EMO. Similar to restarting with a charter school, restarting with an EMO entails that district leaders, including the local school board, exercise leadership in recruiting, selecting, supporting, and monitoring EMOs. Contracts with EMOs are conceptually similar to those with charter management organizations, except that there will, of course, be no references to the state laws that authorize the creation of charter schools. As with charters, some helpful resources for creating contracts and evaluating prospective contractors are the Comprehensive School Reform Quality Center and The Finance Project (2006), Haft (2009), and the National Association of Charter School Authorizers (2009; 2006; 2004).

The relationship between a district and an EMO typically evolves along these lines:

1. District leaders recruit potential EMOs and use a rigorous selection process to ensure that EMOs have the capacity to address identified needs (e.g., a track record with high schools or perhaps a larger percentage of children for whom English is their second language).
2. District leaders attend to system-level governance, including the capacity of the district to identify and monitor the performance of EMOs (CCSRI, 2009).
3. The district or school board enters into a performance-based contract (see for example, Denver Public Schools, 2009) with the EMO that defines the legal relationship between the district and EMO and includes:
   a. The specific autonomies to be provided to the EMO;
   b. A written and agreed upon delegation of responsibilities for the EMO and for the district;

c. The performance benchmarks and indicators to be used to measure the success of the EMO in supporting school improvement, including explicit consequences for not meeting agreed upon benchmarks and outcomes; and

d. Fiscal incentives used to hold the EMO accountable for its performance (Kowal & Arkin, 2005).

Action Principles

For State

1. Develop state-specific mechanisms that will support a district's ability to restart with an EMO. For instance, state education agencies could:
   - Cultivate the development of within-state education management organizations (EMOs), through incentives or partnerships with universities or education organizations.
   - Utilize a rigorous RFP process to recruit and identify potential EMOs to work with targeted districts and schools. For sample RFPs and performance indicators, see Chicago Public Schools (2009) and Denver Public Schools (2009).
   - Develop a model RFP process to be used by districts.
   - Develop and promote the policy conditions that will support effective use of EMOs, such as clarifying or defining:
     - How to select and evaluate EMOs.
     - The scope of autonomy (flexible and non-negotiable) to be granted to EMOs.
     - The scope of the district's and school's conditions that the EMO will be expected to address.
     - The EMO's responsibilities and expected outcomes to be included in a performance contract.

For District

Attend to System-Level Governance

1. Develop the capacity (internally or externally) to effectively identify, select, and monitor EMOs.
2. Engage parents and community members to implement the EMO option and select high-quality providers.
3. Research and prioritize EMOs that have the capacity to provide service in the district.
4. Develop and use a rigorous selection process to recruit and select potential EMOs.
5. Ensure alignment between EMO services and existing district services, as appropriate.

Contracting with EMOs—Articulating the Legal Relationship

1. Engage stakeholder groups to identify the right mix of autonomy and flexibility to be provided to prospective EMOs as a means of gaining support for the EMO option.
2. Clearly articulate the autonomies to be provided to EMOs.
3. Clearly articulate the delegation of responsibilities between the district and the EMO with respect to targeted schools.
4. Develop a set of non-negotiable performance benchmarks to serve as the foundation for holding EMOs accountable.
5. Develop financial incentives to hold EMOs accountable for ongoing performance.
6. Outline consequences for failing to meet benchmarks including modifying or cancelling the contract.

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Closing Schools

Center on Innovation & Improvement

Closing persistently low-achieving schools is one option that may be used by districts as part of an overall district improvement strategy (Kowal & Hassel, 2008; Steiner, 2009). This strategy involves closing an existing school and enrolling students who attended that school in other, higher-achieving schools. Closing low-achieving schools is an option used primarily by large urban districts as part of a comprehensive district reform effort that may also include targeted and intensive school-level interventions, strategies to improve the supply of human capital, and partnering with external charter or education management organizations.

The experience of districts that have closed schools for poor achievement (e.g., Chicago, Pittsburgh, Hartford, Denver) provides key lessons learned and guidance for districts considering closing schools (Steiner, 2009). Specifically, there are clear steps that districts can take to diminish the extent of the challenges and obstacles that will surface when closing schools. The steps, outlined by Steiner (2009) and supplemented by a set of guiding questions, are provided here.

When implementing the school closure intervention, districts should:

1. **Establish policy context**. Strategically decide if closing schools is a feasible and necessary option by considering:
   a. How closing low-achieving schools will contribute to the larger district reform effort.
   b. The extent to which current (or past) school interventions have led to improved school performance in persistently low-achieving schools, and identifying those schools that have not improved despite repeated interventions and increased resources.
   c. Which schools, if any, are having a negative impact on students' academic achievement.
2. **Establish clear procedures and decision criteria** for closing schools, by:
   a. Including key stakeholders, including parents, the school community, and community and business leaders, in developing criteria for closing schools (example: Denver Public Schools).
   b. Developing a consistent and data-based method of assessing school performance, such as a performance index, that supplements state-level academic achievement data and that is uniformly applied to schools across the district.
3. **Operate transparently**. Communicate the decision to close schools, through:
   a. Ongoing and upfront communication with parents, the school community, and the school board or school committee members.
   b. Keeping the district leadership and school board unified (example: asking school board members to vote on a slate of closures, rather than individual school closures).
   c. Developing and articulating a clear rationale for the school closures, including the immediate benefit that students will receive as a result of the school closure.
4. **Plan for orderly transition of students, staff in both the closed school and receiving schools.** Develop and implement a transition plan for students and staff by:
   a. Creating options and ensuring immediate placement of displaced students.
   b. Communicating directly (e.g., face-to-face) with the families of all displaced students.
   c. Taking proactive measures to communicate with staff and plan for transitioning displaced staff.

Steiner (2009) identifies a number of implications for districts to consider when thinking about closing persistently low-achieving schools which is adapted and presented below as a set of district action principles.

Action Principles

For District

1. Assess the district's capacity to manage the closing of schools, including all of the steps involved in closing schools. Address capacity issues prior to closing schools.
2. Consider how closing schools fits or aligns with the broader district improvement strategy.
3. Prior to closing any schools, identify or develop options for students from to-be-closed schools—develop a supply of higher-performing schools.
4. Develop fair and transparent criteria for identifying schools that may be closed.
   - Engage community and business leaders in the development of criteria.
   - Access external and credible experts in the development of criteria.
5. Develop a clear rationale for why schools are being closed and how students will benefit.
6. Communicate early and often to the public the rationale for why schools are being closed and how students will benefit.
7. Work closely with the school board or school committee members to minimize challenges.
8. Develop and communicate a transition plan for students and staff that includes:
   - A dissolution plan for completing the closure process.
   - A transition plan for students that includes attention to students' safety in school and on their way to and from school.
   - A transition plan for staff and administrators.
9. Communicate directly with students and families once schools are closed to support the transition plan.
10. Communicate with receiving schools (e.g., those schools receiving students from closed schools) to ensure that incoming students are welcomed and integrated into the school community.

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Implementing Community-Oriented School Structures

Center on Innovation & Improvement

A community-oriented school is both a place and a set of partnerships between the public school and other community resources, and it is often open for extended hours and days. Its integrated focus on academics, health and social services, youth and community development, and family and community engagement leads to improved student achievement and attendance, stronger and more involved families, and healthier communities (Bireda, 2009; Blank, Melaville, & Shah, 2003).

Each community-oriented school looks different, because each works to meet the unique needs of its students in their particular context. The concept is based on nearly a century of research that has concluded that children develop along multiple, interconnected domains, and when one developmental domain is ignored, other domains may suffer (Blank & Berg, 2006). By addressing the needs of the whole child—physical, social, emotional, and academic—community-oriented schools create environments that fulfill all the necessary conditions for learning. We also know that when the core academic curriculum is tied to the community, removing the artificial separation between the classroom and the real world, student outcomes are improved (Blank, Berg, & Melaville, 2006). "Complementary learning" involves coordinating non-school community and family resources with existing school services; co-locating these services at the school can have a positive, synergistic effect on a number of desirable outcomes for students, families, schools, and communities (Grossman & Vang, 2009).

Evaluating one model of community-oriented schools, Communities In Schools' seven-state study shows improvement in math, reading, and graduation rates is linked to integrated service provision. Notably, the CIS Model of providing integrated student services has a stronger impact on school-level outcomes than providing services for students in an uncoordinated fashion (see http://www.cisnet.org/about/NationalEvaluation/Normal.asp). Research also suggests the successful engagement of urban parents and community residents on school campuses requires diverse outreach strategies, including using personal outreach methods in a familiar language and creating an inviting environment, but the strongest motivator is showing how all services/programs ultimately help the children succeed (O'Donnell, Kirkner, & Meyer-Adams, 2008). Research on community-oriented schools in rural settings is sparse, although there is indication that interventions are needed in such settings (U.S. GAO, 2004).

Action Principles

For District

1. Ensure each community-oriented school has a strong academic program at its core, with all other services complementing the central academic mission.
2. Ask each partnering organization to designate an employee at each school site to operate as a contact point between the school, organization, students, families, and community members, with the goal of creating sustainable and effective partnerships.
3. Develop joint financing of facilities and programs by school districts, the local government, and community agencies.

For School

1. Ensure that all staff—administrators, teachers, and other staff—are willing to collaborate with outside organizations and are provided with training to do so effectively.
2. Involve parents, community members, school staff, and other stakeholders in planning for services to be offered at the school site.
3. Integrate in-school and out-of-school time learning with aligned standards.
4. Incorporate the community into the curriculum as a resource for learning, including service learning,

place-based education, and other strategies.

5. Conduct quality evaluations regularly, including data collected from all stakeholders, to determine strengths and weaknesses of services and programs offered to create a continuous cycle of improvement.

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Changing High School Structures and Programs (NHSC)

Changing High School Structures and Programs

National High School Center

The School Improvement Grants have expanded the funding assistance available to secondary schools, especially with the inclusion of Tier II schools (see chapter 1 and 2 for more information). As a result, states and school districts have an opportunity to put unprecedented resources toward high school reforms that would increase graduation rates, reduce dropout rates, and improve teacher effectiveness for all high school students, particularly for students who are in greatest need of high quality teaching and supports to catch up academically with their peers. Research suggests that structural changes designed to enhance learning opportunities, in combination with instructional enhancements, are critical aspects of effective high school reform (Quint, 2006). The pieces within this section provide a brief overview of five structural changes.

- Dual-enrollment gives students the opportunity to take postsecondary-level courses in high school that allow them to earn high school and college credit.
- Thematic learning academies are smaller academies within a larger school that focus on specific themes. These academies—which can be designed around academic- or career-based themes—focus on personalization, the development of college- and career-ready skills through academic and occupational curricula, and easing transitions into and out of high school.
- Credit-recovery programs allow students to recover lost credit through strategies such as afterschool or summer coursework and online portals.
- Re-engagement strategies are designed to meet the needs of youth who have dropped out of high school or are at risk for dropping out. Programs are designed to meet the unique needs of students who are poor, incarcerated, pregnant or parenting, homeless, and/or in need of special education or English language learner services.
- Smaller learning communities include a variety of strategies and structures (e.g., small schools, thematic learning academies, magnet programs) used to subdivide larger comprehensive high schools to foster student engagement and teacher involvement.

The state plays a critical role in ensuring that districts and schools make innovative structural changes to high schools and have the resources they need to fully implement and sustain these changes. Furthermore, the state

can help monitor the success of these structural changes so that effective programs are scaled up and ineffective programs are phased out. Some examples of how states can support these programs include the following:

- Establishing sophisticated but user-friendly systems for collecting, disaggregating, analyzing, monitoring, and using student data; and hold schools and districts accountable for identifying and supporting students who are struggling;
- Supporting—through policymaking and funding—district and school efforts to personalize the learning environment, to ease transitions into and out of high school, and to ensure that students are exposed to a balanced blend of academic and career-oriented learning opportunities;
- Helping districts build leadership capacity among faculty and administrators in low-performing schools to address diverse student needs; and
- Promoting district-level partnerships with the community, employers, and institutions of higher education to facilitate learning opportunities for students and their teachers and to make coursework relevant.

State and local educators and policymakers must carefully coordinate and align their efforts to implement the structural changes that research suggests can improve outcomes for high school students. This section provides background on some promising structural innovations and specific examples of how states, districts, and schools may go about implementing them. For each featured approach, a brief list of references and resources is also provided.

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Dual Enrollment/Early College High Schools

National High School Center

A strategy designed to address the challenge of improving student access to and success in college is the expansion of dual enrollment opportunities, where high school students simultaneously earn high school *and* postsecondary credit for the same course while being exposed to the demands of college-level work (Bailey, Hughes, & Karp, 2002; U.S. Department of Education, 2003; 2004). These courses can be taken on a high school campus, the campus of a postsecondary institution, and sometimes through distance learning. Research has documented the effectiveness of dual enrollment efforts in aiding high school students not only in their transition to college, but also in graduating from college (Bailey et al., 2002; Anderson, 2001; Wechsler, 2001; Crossland, 1999).

It is becoming more common for high schools to give students some level of access to college courses. According to an Education Commission of the States database, in 2008 forty-six states had statewide policies governing at least one aspect of dual enrollment. State policies vary widely on a number of dimensions, including state oversight, target population, admissions requirements, course locations, tuition, and funding. According to an NCES study that surveyed U.S. high schools, 71% of high schools reported offering dual credit courses in 2002-03. However, dual enrollment was less available to the student populations traditionally underrepresented in postsecondary institutions. Of the high schools with more than a 50% minority student population, only 58% reported offering dual credit or college-level classes (Waits, Setzer, & Lewis, 2005). Studies indicate that despite the relatively wide availability of college courses to high school students, the number of students taking advantage of the opportunity is fairly small (Kleiner & Lewis, 2005).

One specific effort to expand opportunities for student participation in dual credit options is the Early College High School Initiative. There are over 200 Early College Schools (ECSs) in 24 states and the District of Columbia serving a population of over 30,000 students. ECSs are designed to ensure that underrepresented, first generation college-goers can earn a high school diploma and up to two years of college credit tuition-free. While other dual enrollment options provide students with a taste of college, the goals of ECSs are to provide students with a blended and more integrated academic and social experience.

The specific designs of ECSs vary, but all agree to adhere to the initiative's core principles that include: a commitment to serving students underrepresented in higher education; a partnership between a local education agency, a higher education institution, and the community, all of whom accept joint responsibility for student success; a jointly developed, integrated academic program that allows students to earn one to two years of transferable college credit; a comprehensive student support system that develops the academic and social skills necessary for college success; and a commitment to advocate for supportive policies that advance the early college movement. A series of reports (AIR & SRI, 2006; 2007; 2008) have examined ECSs and their characteristics, and the National High School Center summarized early findings in one of its publications (National High School Center, 2007).

Action Principles

For State

1. Consider including dual enrollment as part of a larger statewide P-20 alignment effort.
2. Consider adopting statewide articulation agreements that address credit transfer for dual credit classes in both 2- and 4-year institutions of higher education.
3. Consider identifying funding streams that would help make dual credit options affordable for all students, not just those with the ability to pay for tuition, books, and other materials.
4. Consider aligning standards, assessments, and graduation requirements with postsecondary expectations.
5. Create the longitudinal data systems that can track student progress pre-K-12 through postsecondary and workplace.

6. Consider the implications for tuition assistance and campus housing for recent high school graduates transitioning to postsecondary institutions with one or two years of college credit.
7. Consider the impact that preparation for end-of-course exams might have for students who want to enroll in dual credit options.
8. Consider incentives for collaboration and communication across the educational system.

For District

1. Promote partnerships with postsecondary institutions.
2. Provide information/resources to support program design options across multiple schools and postsecondary institutions.
3. Serve as policy advisors on program implementation.
4. Help find instructors who could teach college level courses and assist with administrative planning.

For School

1. Ensure that school staff members (administrators and guidance counselors) fully understand the state's graduation and dual enrollment policies.
2. Design clear course pathways that provide students with opportunities for dual credit options, particularly for students traditionally underrepresented in postsecondary institutions.
3. Provide course-selection guidance for students interested in and eligible for dual credit options.
4. Balance student interests with the transferability of credits when advising students on course selection.
5. Provide adequate academic and social support for student success in college-level classes.
6. Build time and incentives for cross-institutional collaboration between high schools and postsecondary institutions.

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Thematic Learning Academies

National High School Center

The transition to high school presents numerous academic and social challenges for some students, particularly ninth graders and those who are underprepared for a rigorous college-preparatory curriculum (Bridgeland, Dilulio, & Morison, 2006) or have difficulty acclimating to the larger, more bureaucratic environment of the typical American high school (Lee & Smith, 2001). With fewer opportunities for individualized attention, students can easily get lost in the crowd, fall behind, lose interest in school, and eventually drop out. To help address this concern, schools across the nation are implementing thematic learning academies, which tend to be smaller, focused programs within a larger high school. Popular approaches to learning academies—which include personalization as a critical element for success—are theme-based academies (e.g., leadership, arts, technology), ninth grade (or freshman) academies, and career academies. These academies focus on students' individual needs and provide them with a balanced mix of core academic preparation and opportunities to develop practical, work-based skills. The academy models are helping high schools successfully engage students and keep them on track for graduation.

Theme-based academies. Some learning academies are designed to provide a learning environment centered on a particular theme. While some of these themes can be related to a specific career field (e.g., science, technology, engineering, and mathematics), other themes can be more general (e.g. leadership). Specific designs for thematic learning academies can vary. For example, these academies can be limited to students in a particular grade, or can be offered as multi-grade arrangements.

Ninth grade academies. Referred to as the "ninth grade bulge," students in ninth grade comprise the largest percentage of the overall high school population because they are much more likely to fall behind during this critical year and not be promoted to tenth grade (Wheelock & Miao, 2005). Ninth grade academies provide specialized attention during this transitional year by helping underprepared students catch up academically, offering a more personalized learning environment, and giving teachers the opportunity to collaborate. Some ninth grade academies include a seminar on study skills, and some use a block scheduling structure that allows time for intensive development of the critical skills that students need to succeed in high school (Smith, 2007).

Other aspects of ninth grade academies may include: an advisory component that facilitates meaningful interaction between teachers and students and can help identify and respond to students' needs early on; and teacher teams that are responsible for addressing students' learning needs and responding to discipline and attendance problems in proactive ways (e.g., eliminating in-school suspension). Upper grade academies, or "houses," provide similar supports for students beyond ninth grade.

Career academies. Designed to expose students to a rigorous core curriculum, career academies simultaneously teach college- and career-ready skills in specific fields, such as arts, business, health sciences, hospitality, and engineering. Close partnerships with the employers in the local community provide career awareness, internships, and other work-based learning opportunities for students.

Like the other academy models, an emphasis is placed on personalized learning (Smith, 2008), and career academies often involve a mentoring or advisory component. Research suggests that career academies can have a positive impact on attendance, credit accrual, graduation rates, and college attendance rates, as well as postsecondary employment prospects for young men (Kemple & Willner, 2008).

Action Principles

For District

1. Monitor student and school data to ensure that students who are falling behind and/or are at risk for dropping out receive additional supports through placement in thematic learning academies.
2. Provide support for schools developing thematic learning academies through professional development and coaching.

3. Foster collaboration between feeder middle schools and high schools to promote placement of students, including students with disabilities and English language learners, in ninth grade and other learning academies to ensure that students in need of additional support have their needs met from the first day of high school.
4. Encourage school leaders to develop and nurture partnerships with local businesses and organizations that are linked with the school's thematic academies.

For School

1. Determine and implement a structure to personalize the learning environment best suited to the school's context.
2. Provide parents with information about the purpose and outcomes of thematic learning academies.
3. Develop partnerships with local business, organizations, and government agencies and leverage these partnerships to give students hands-on learning opportunities, such as internships and job shadowing.
4. Provide professional development for all staff to help prepare them for the new school structure and to support new roles.

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Credit-Recovery Programs

National High School Center

Research has shown that students who miss or fail academic courses are at greater risk of dropping out of school than their peers. To re-engage these students researchers recommend that schools provide extra academic support (Dynarski et al., 2008). For example, schools can provide extra study time and opportunities for credit recovery and accumulation (also known as credit retrieval). These programs may be delivered in remedial classes during the regular school day or as extended learning time (e.g., before or after-school, Saturday school, or summer programs). In these programs, students can work closely with teachers either individually or in small groups to complete coursework or credits required to graduate. In other words, credit-recovery programs need to address the challenges that prevented students from previous success. This may include flexible pacing and schedules of instruction, adapting instructional methods and content to students' level of skills and learning styles, extra practice, and frequent assessments to inform instruction and to provide feedback to students. Data reported by schools suggests that credit-recovery programs may have positive effects on earning credits toward graduation, attendance rates, and passing rates on state standardized tests (e.g., Trautman & Lawrence, 2004).

Recognizing that credit recovery can be an important strategy for dropout prevention, several comprehensive dropout prevention models include this component. For example, the Talent Development High School model offers after-hours credit-recovery programs such as Twilight School and other summer and weekend activities for making up or catching up on work. This model has shown positive effects on students' average number of course credits (Kemple, Herlihy, & Smith, 2005). Additionally, an increasing number of schools use online learning options for credit recovery (Watson & Gemin, 2008). The use of technology as an alternative to traditional classroom instruction individualizes instruction and allows for scheduling flexibility. However, it also requires strategizing in order to maintain students' motivation and engagement and to help them develop independent learning skills, self-discipline, and technology-based communication skills necessary to become successful online learners. There is some initial research evidence supporting the effectiveness of utilizing technology to help students complete courses required for graduation (e.g., Cavanaugh et al., 2004; Hannafin, 2002).

Action Principles

For State

1. Set clear standards to govern credit-recovery programs.
2. Ensure programs meet minimum credit standards and are implemented with fidelity.
3. Determine the maximum number of credit recovery courses that a student can take.
4. Determine the instructional methodologies used for the credit recovery program(s) (e.g., online program, direct instruction, computer assisted instruction, etc.).
5. Certify national and state instructional programs (e.g., virtual learning courses) that can be used by districts and schools for credit recovery.

For District

1. Offer credit-recovery programs (e.g., an intensive semester of instruction in reading and mathematics, online credit-recovery programs).
2. Recommend that teachers certified in the appropriate subject oversee students trying to make up credits.
3. Establish an application process that requires parental consent for participation in a credit-recovery program.
4. Establish minimum criteria to determine eligibility for participation in the credit-recovery program.
5. Use a longitudinal data system to identify students at-risk for dropping out of school who may benefit from credit-recovery programs.

6. Use longitudinal data systems to track the outcomes of students participating in credit-recovery programs to inform decisions about retaining, re-designing, or replacing current credit-recovery programs.
7. Provide professional development and resources for teachers and others who are involved with the credit-recovery program.

For School

1. Offer mandatory support classes or after-school courses for credit-recovery for students at high risk (e.g., below 2.0 grade point average).
2. Monitor the credit-recovery program with appropriate data supports to make sure students have mastered the material before being awarded credit.
3. Convene a panel of principals and teachers to peer review each credit-recovery course to ensure it aligns with state and local standards.
4. Approve participation of a student in a credit-recovery program after review by the school leadership team, school improvement team, grade level team, or other school committee including the guidance counselor responsible for the student and a teacher in the appropriate subject area.
5. Continue to review data to help inform instructional decisions that will, over time, reduce the number of students needing credit-recovery options.

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Re-engagement Strategies

National High School Center

Re-engagement of high school dropouts (also known as school re-entry or dropout recovery) aims to give dropouts who want to return to school the help they need to graduate. More specifically, re-engagement programs aim to help dropouts remain healthy and safe; ready for work, college, and military service; ready for marriage, family, and parenting; and ready for civic engagement and service. Re-engagement programs may be housed in a wide range of offices and departments—most commonly a high school or an alternative education center. In some cases, re-engagement programs are overseen by a district central office or by specific district departments.

Some of the re-engagement programs are tailored to meet the unique needs of high school dropouts including young adults below the poverty line, pregnant youth and young parents, incarcerated youth and youth offenders, special education students, English language learners, homeless youth, and migrant youth. A number of research studies have demonstrated the positive impact of re-engagement programs on academic outcomes, employment outcomes, and health and social-emotional outcomes of these diverse populations including economically disadvantaged youth (Bloom, Gardenhire-Crooks, & Mandsager, 2009; Schochet, Burghardt, & Glazerman, 2001), migrant youth (e.g., Cranston-Gingras, 2003), youth offenders (e.g., Abrazaldo et al., 2009), and young parents (e.g., Bos & Fellerath, 1997; Quint, Bos, & Polit, 1997; Weinman, Buzi, Smith, & Nevarez, 2007).

In order to best serve the needs of these students, re-engagement programs offer a multi-dimensional approach that may include, in addition to intensive academic interventions, targeted interventions to promote responsible citizenship, life-coping skills, physical fitness, health and hygiene, job skills, parenting skills, and college preparation. The nature of the additional program components varies by model and population served. For example, in a model for youth offenders, grantees provide services in partnership with juvenile justice, education, construction, and workforce development agencies (Abrazaldo et al., 2009). A program that provides long-distance learning for children of migratory and seasonal farmworkers (Cranston-Gingras, 2003) and a model for at-risk youth (Bloom, Gardenhire-Crooks, & Mandsager, 2009) help youth transition from the program by providing vocational evaluation and counseling, career exploration, job skill development, and assistance in postsecondary placement. Instruction is often individualized to students' needs through small class sizes and tutoring services. In addition, students may receive mentoring, counseling, referral to external support systems, and incentive payments tied to length of stay, program attendance, or performance. To overcome factors that may prevent students from maintaining regular attendance, some programs also provide housing, child care, and transportation. While some re-engagement programs are non-selective, others specify eligibility criteria such as minimal scores on basic tests of mathematics and reading, no current drug use, demonstration of motivation and personal responsibility, no current gang affiliation, no records of criminal behavior, and no current psychological problems.

To recruit participants, re-engagement programs may host a hotline for dropouts who would like to learn more about the options available to them, run ads in the local media, distribute flyers, or hold fairs at local schools where students can re-enroll. Some districts or organizations may hire a specialist who works with community non-profit organizations and faith-based groups to identify dropouts, contact them, and provide information about re-engagement opportunities. In some cases, programs may recruit and train teachers, counselors, administrators, business people, parents, and other volunteers to visit students at home to encourage them to re-enroll.

Action Principles

For State

1. Identify and profile districts and schools within the state that have successfully re-engaged dropouts.
2. Communicate targets for dropout recovery and graduation rates to districts.
3. Require districts to provide administrators with professional development on practices for preventing or recovering dropouts.
4. Make available external or in-house experts on dropout recovery to districts as part of providing technical assistance and other resources.

5. Identify or provide funding sources to support dropout recovery efforts.
6. Provide guidance in how federal and state funds can be used to support dropout recovery efforts.

For District

1. Consider creating a dropout recovery office that has responsibility district-wide for identifying, tracking, and recovering students who dropped out.
2. Develop a district-wide dropout recovery database to identify and track students for dropout recovery. The database will include academic and support services provided to students, high school graduation or GED, and other student outcomes (e.g., college enrollment, job attainment).
3. Determine the ongoing staff development activities that will most directly impact the effectiveness of the re-engagement staff and provide professional development on a regular basis.
4. Collaborate with other state and municipal agencies (e.g., local law-enforcement agencies) and specific departments and offices in the district (e.g., the migrant education office) to coordinate delivery of services to recovered dropouts.

For School

1. Build awareness and obtain staff buy-in of the re-engagement program.
2. Prepare a school-specific dropout recovery plan and incorporate in the school improvement plan.
3. Assign appropriate staff to the re-engagement program, including an administrator, and define their responsibilities in the identification, tracking, recovery, and monitoring of recovered students. Identify the key qualities of staff for re-engagement programs and hire experienced teachers that have the desired qualities.
4. Establish a warm and welcoming atmosphere on the part of administrators, teachers, and staff from the time a student comes to enroll and throughout the student's stay in the program.
5. Maintain close communication and collaboration with parents/guardians of re-entry students.

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Smaller Learning Communities

National High School Center

Smaller learning communities (SLCs) refer to all school design efforts intended to create smaller, more learning-centered units of organization (Oxley, 2007). These communities serve up to a few hundred students, and are formed either by building new limited-size schools or by converting comprehensive high schools into multiple communities. The goals of creating SLCs are to increase student engagement and teacher involvement. Many educators believe that in small schools teachers know their students better; students feel less isolated and alienated; discrepancies in the achievement gap can be reduced; and teachers are encouraged to develop innovative strategies (Cotton, 2001).

Common structural approaches to SLC efforts include the following:

- Small schools break large schools into small, multi-grade, autonomous programs housed within a larger school building. Schools-within-a-school may be organized around themes. Each has their own culture, program, personnel, students, budget, and school space.
- Career academies organize curricula around one or more careers or occupations by integrating both academic and occupation-related classes. (For more information see the section on "Thematic Learning Academies" in this chapter.)
- Freshman academies, also called ninth grade academies, are designed to meet the needs of ninth grade students as they make the transition from middle school to high school. (For more information see the section on "Thematic Learning Academies" in this chapter.)
- "House" plans assign students within the school to groups, either across all grades or by grade level, each with its own disciplinary policy, student activity program, student government, and social activities.
- Magnet programs usually have a core focus (e.g., math and science, the arts) and selectively draw students from the entire district (Page, Layzer, Schimmenti, Bernstein, & Horst, 2002; Bernstein, Millsap, Schimmenti, & Page, 2008).

One of the most common strategies used in SLCs is interdisciplinary team teaching, which groups core teachers to share students in common for multiple years and integrate various curricula. Other personalization strategies that can often be found in SLCs include teacher advisory programs that assign teachers to a small number of students for whom they are responsible over multiple years; adult advocates or mentors who offer support and guidance to students on a regular basis over several years; and family advocate systems that bridge the gap between school and home with regular meetings of students and families with their family advocate at the school (Bernstein et al., 2008; U.S. Department of Education, 2009).

Action Principles

For State

1. Provide assistance, information, and/or support for establishing smaller learning communities.
2. Foster state-level policies and funding support strategies to promote the creation of SLCs.

For District

1. Partner with parents and community stakeholders to foster awareness and support for SLCs.
2. Provide adequate resources for developing and sustaining the SLC, including building space, financial support, staff, etc.

For School

1. View the SLC as a means to an end, not an end unto itself.
2. Ensure teachers' support of the goals and methods of the SLC and plan for the changes in their working environment.

3. Form interdisciplinary teams of teachers that share students and planning time in common and support the development of innovative curriculum and instructional programs.
4. Provide professional development focused on SLC structure and strategies, including effective teaming practices.
5. Designate specific assignments within the SLC for school administrators, counseling staff, special educators, and remediation specialists.
6. Ensure that school admission is driven by student and teacher choice and that the SLC attracts a diverse group of students.

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5

Leadership and Decision Making: Introduction

Center on Innovation & Improvement

True to its nature, the field of education customarily relies upon the lever of change it knows best for improving schools—building the capacity of educators to better perform their roles by teaching them new skills and ways of doing things. Capacity building through training, professional development, and access to resources is a single lever for change, and alone it is often disappointing in its effects.

The accountability movement has taught us that improvement requires yardsticks for performance, both to guide school people's improvement efforts and to enhance their motivation to change. Public disclosure of school performance, based on transparent metrics, carries with it incentives for change. Public recognition of exemplary performance provides a positive incentive—something to strive for. Public disclosure of poor performance is a negative incentive—educators try harder to avoid it.

For the past couple decades, school improvement has largely been driven by these two levers of change—capacity building (professional development tied to evidence-based practices) and incentives (accountability's double-edged sword of public recognition and professional embarrassment). However, capacity and incentive without opportunity create a formula for frustration and discouragement. The 2009 SIG program adds to these two levers of change an important third one—opportunity for change. Simply put, this means getting out of people's way so they can make decisions, take actions, and assume responsibility for what they do.

The interventions of turnaround and transformation call for greater school-level autonomy, more flexibility in staffing, scheduling, and budgeting, along with greater accountability for results. A restart, wherein the school is opened under new governance and with a chance for dramatically new ways of operating, carries with it the expanded autonomy granted to charter schools and educational management organizations. Given the opportunity for greater latitude in decision making, just how does leadership respond?

This chapter looks at provisions in the SIG program that expand school leaders' opportunity to make sound decisions by:

- removing bureaucratic and regulatory barriers,
- providing essential information and tools for analyzing data, and
- tracking progress to facilitate agile adjustments in course.

The chapter's topics reinforce the SIG program's insistence upon greater school-level autonomy and responsibility, more flexibility in local decision making, and greater accountability on the part of school leaders for results. As a counter-balance to the over-reliance on the leadership of one person (the principal), the chapter also provides guidance for putting in place team structures and processes to distribute leadership (as well as responsibility) in order to accelerate change and sustain positive reforms.

Establishing Team Structures to Drive Improvement

Center on Innovation & Improvement

Teams at both the district and school levels, when effectively purposed, organized, and supervised, provide an infrastructure for continuous improvement. District teams' decisions can be informed by input from the school teams.

Marzano (2003) points out that leadership should not reside with one individual; a team approach to planning and decision making allows for distributive leadership. While principals in effective schools promote staff collaboration, teachers working with less effective instructional leaders function more as individuals than as members of a school team—"in the less successful schools, teachers were often left completely alone to plan what to teach, with little guidance from their senior colleagues and little coordination with other teachers" (Rutter et al., 1979, p. 136). Collaborative activities that do occur in these less successful schools are more socially based and less professionally oriented than the exchanges that occur in schools with more effective instructional leaders.

Schmoker (1996) recommends that teams of teachers implement, assess, and adjust instruction in short-term cycles of improvement—not annually, but continuously. Common team tasks include intensive efforts to align content taught across grades, and development of interim and diagnostic mini-assessments to monitor student progress on a continuing basis. Practices such as the development of agendas and minutes and the use of organized procedures for meetings help the teams stay focused and maintain a history of team work.

Planning and decision making within the district and school require *teams*, *time*, and *access to timely information*. That is, decision-making groups must be organized and given time to plan and monitor the parts of the system for which they are responsible. Hassel et al. (2006) provide useful tools to begin the change process and get planning teams started.

A basic structure for team planning, work, and decision making in a school includes a Leadership Team, Instructional Teams, and a team focused on the family-school connection (such as a School Community Council).

- The Leadership Team is typically comprised of the principal and team leaders from the Instructional Teams (grade level or subject area teams). The Leadership Team may also function as the School Improvement Team, with parent members attending meetings scheduled for purposes of reviewing and amending the school improvement plan.
- Instructional Teams are manageable groupings of teachers by grade level or subject area who meet to develop instructional strategies aligned to the standards-based curriculum and to monitor the progress of the students in the grade levels or subject area for which the team is responsible.
- A School Community Council is comprised of the principal, counselor, social worker, teachers, and parents (typical configuration), with parents constituting the majority of the membership. The School Community Council advises, plans, and assists with matters related to the school-home compact, homework, open houses, parent-teacher conferences, school-home communication, and parent education (including training and information about learning standards and the parents' role in supporting children's learning at home).

Action Principles

For District

1. Address district and school team structures and expectations in official district policy.
2. Expect teams to sustain their operation even through changes in district and school leadership.
3. Provide adequate time for teams to meet, conduct business, and meet the expectations of district policy.
4. Require teams to prepare and maintain documentation of meeting agendas, minutes, and work products.
5. Provide professional development for district and school personnel on effective teaming practices.

6. Include successful engagement of teams and evidence of their productivity in evaluation of district and school administrators.
7. Systematize the regular reporting of the work of school and district teams to the school board.

For School

1. Incorporate team structures into the school improvement plan and school governance policy.
2. Develop written statements of purpose and by-laws for each team's operation.
3. Provide teams with work plans for the year and specific work products to produce.
4. Insure that all teams prepare agendas for their meetings, maintain minutes, and catalog their work products.
5. Maintain a file of the agendas, work products, and minutes of all teams.
6. Provide adequate time for teams to meet, conduct business, and meet the expectations of district and school policy. A rule of thumb is that Leadership Teams and School Community Councils meet twice each month for an hour each meeting; Instructional Teams meet twice each month for 45 minutes to conduct business and for blocks of time of 4 to 6 hours each month to review student learning data and develop and refine instructional plans.
7. Insure that teams receive timely access to information, including student progress data and summaries of classroom observations.
8. Provide professional development on effective teaming practices.

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Granting Waivers and Exemptions

Center on Innovation & Improvement

Research on change efforts such as the New American Schools comprehensive school reform initiative (Berends, Bodilly, & Nataraj Kirby, 2002) and Edison Schools (Gill et al., 2005) document the importance of giving educators the flexibility to implement significant changes. States have established advisory processes to examine existing regulations and propose changes to remove barriers to improvement, replacing regulation with results-based accountability. States have also provided waiver and exemption processes that allows districts to request relief from particular regulations that restrict their innovation.

Collective bargaining agreements between districts and staff organizations can also create obstacles to change (Hannaway & Rotherham, 2006), as can local policies set by school boards (Hill, 2003). One barrier to improvement identified by California's state policymakers, for example, was the set of collective bargaining provisions allowing senior teachers to transfer within school districts until very close to the start of school. This made it difficult for districts to hire and place new teachers on a reasonable timeline. The state enacted new legislation in 2006 that allows principals to hire teachers after April 15 regardless of whether they are seniority-based transfers (Scott & Rhee, 2006). Vermont established standards that guide state department of education policies, including one requiring that "any rule or law should advance student performance, but not in such a rigid manner as to foreclose alternate means of achieving goals" (State of Vermont Board of Education, 1992, January 21, pp. 3-4 in Lusi, 1997).

Action Principles

For State

1. Establish a process for continuous review of state regulations and examination of proposed legislation and regulation to reduce regulatory burden on districts and schools.
2. Provide waiver and exemption procedures whereby districts can petition for relief from regulations that restrict innovation.
3. Grant charter-like autonomy to schools in the process of turnaround or transformation.
4. Amend state collective bargaining statutes and regulations that limit the ability of districts and schools to make justifiable changes in staffing policies and procedures.
5. Use state policy- and rule-making authority to place constraints on the barriers thrown up by districts.

For District

1. Establish a process for continuous review of district policy to reduce burden on schools and principals.
2. Provide waiver and exemption procedures whereby schools can petition for relief from district policy that restricts their innovation.
3. Grant charter-like autonomy to schools in the process of turnaround.
4. Negotiate for changes in collective bargaining agreements to provide principals with greater control over the hiring, placement, and retention of staff.

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Providing Flexibility in Staffing, Scheduling, Budgeting

Center on Innovation & Improvement

State legislatures, governors, state boards of education, SEAs, and districts are uniquely positioned to create the conditions for change. As a result, states and districts also need to attend to the opportunities that state and district policy provides for districts and schools to do what they need to do to improve student performance. According to the Mass Insight Education & Research Institute's *The Turnaround Challenge*, "States and districts can engineer more effective turnaround at scale by creating space that supports *outside*-the-system approaches, focused *inside* the system" (Calkins et al., 2007, p. 11). Its top lesson learned from high-performing, high-poverty schools is, "Clearly defined authority to act based on what's best for children and learning—i.e., flexibility and control over staffing, scheduling, budget, and curriculum" (Calkins et al., 2007, p. 11).

Flexibility can take many forms. Schedules might be modified to accommodate longer school days or years to provide longer periods for some subjects or to set aside time for teachers to meet to discuss student work. Schools might elect to allocate money to hire extra reading teachers or curriculum coordinators or use some funds to pay teachers for extra hours spent examining and discussing data or engaging in professional development activities. Mid-continent Research for Education and Learning (2003) states that, for the best likelihood of sustained improvement, "the school has control over the majority of its budget. To the extent possible all funds from different sources are combined and directed in support of school goals."

In a case study of improvement in the Kansas City, Kansas schools, Lane (2009) found that one of the key strategies supporting dramatic improvement was providing schools with "defined autonomy," in which principals had flexibility and control in the areas of staffing, budget, and scheduling. Specifically, to help them address the challenges of increased accountability, principals and teachers were given autonomy to decide how best to implement improvement activities in their schools. For example, to facilitate changes in staffing and scheduling, the district and the teachers' union added a provision to the teachers' contract, "'contract flex,' that allowed schools to quickly propose changes to staffing and scheduling and have these changes approved by the union on a school-by-school basis" (p. 28). This required that the central office place considerable trust in local school staff, but the defined autonomy engendered "an atmosphere of trust and an emerging culture of improvement" (p. 29) and also "reinforced the idea that the district and schools share the responsibility for what happens in schools and in classrooms" (p. 32). The district set non-negotiable goals, but allowed schools the latitude to decide for themselves how best to attain those goals.

Action Principles

For State

1. Provide waiver and exemption procedures whereby districts can petition for relief from regulations that restrict their flexibility in staffing, scheduling, and budgeting based on local needs (Redding & Walberg, 2008).
2. Grant charter-like autonomy to schools in the process of turnaround (Barber, 2008).
3. Amend state collective bargaining statutes and regulations that limit the ability of districts and schools to make justifiable changes in staffing, budgeting, and scheduling policies and procedures (Massachusetts Commonwealth Pilot School Model).
4. Use state policy- and rule-making authority to place constraints on the barriers caused by district policies (Redding & Walberg, 2008).

For District

1. Provide waiver and exemption procedures whereby schools can petition for relief from district policies that restrict their flexibility in staffing, scheduling, and budgeting based on local needs (Redding & Walberg, 2008).

2. Grant charter-like autonomy to schools in the process of turnaround (Barber, 2008).
3. Negotiate for changes in collective bargaining agreements to provide principals with greater control over budgeting, scheduling, and the hiring, placement, and retention of staff (Massachusetts Commonwealth Pilot School Model; Lane, 2009).
4. Give principals the flexibility to act based on what works for the school's student population—including making decisions about scheduling, staffing, and budgeting (Kowal et al., 2009).

For School

1. Consider scheduling changes that could facilitate improved student learning.
2. Provide teachers with the opportunity to use time differently, such as allocating more time for monitoring student progress, data analysis, joint planning, or professional development (Kowal et al., 2009).
3. Align budgets with school improvement priorities.

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Establishing Early Warning Systems

National High School Center

Nearly one-third of all high school students leave the public school system before graduating (Swanson, 2004), and the problem is particularly severe among students of color and students with disabilities (Greene & Winters, 2005). One important element of dropout prevention efforts is the early identification of students at highest risk for dropping out and the targeting of resources to keep them in school. An early warning system that uses indicators based on readily accessible data can predict, during students' first year in high school, whether the students are on the right path toward eventual graduation.

Research is clear that ninth grade is a "make or break" year. More students fail ninth grade than any other grade in high school, and a disproportionate number of students who are held back in ninth grade subsequently drop out (Herlihy, 2007). The most powerful predictors of whether a student will complete high school include course performance and attendance during the first year of high school (Allensworth & Easton, 2005; 2007). Therefore, systematic collection of student attendance and course performance data can be used to develop an effective early warning system that can also be tailored to local contexts.

There are several ways to use course performance information to gauge students' likelihood of graduating or dropping out. One of the most powerful is to calculate a version of the "on-track indicator" that has been customized to fit local contexts. The Consortium on Chicago School Research introduced the "on-track indicator" in 2005 by combining two highly predictive ninth-grade risk factors: course credits earned and course grades. First-year high school students in the Chicago Public Schools are classified as "on track" if they earn (a) at least five full-year course credits and (b) no more than one F in one semester in a core course during the first year of high school. On-track students are more than 3.5 times more likely than students who are off track to graduate from high school in 4 years (Allensworth & Easton, 2005). The on-track indicator reflects students' ninth grade academic performance. Additionally, attendance during the first year of high school is also directly related to high school completion rates. Even moderate levels of absences (1-2 weeks in the first semester of high school) are associated with lower rates of high school graduation (Allensworth & Easton, 2007). The biggest risk factor for failing ninth grade is the number of absences during the first 30 days of high school, and failing ninth grade is one of the most important predictors of dropping out (Neild & Balfanz, 2006).

Action Principles

For State

1. Use and monitor aggregate on-track rates to identify high schools and districts with high proportions of students at risk of dropping out in order to prioritize allocation of resources.
2. Create state-level data systems that incorporate on-track indicators and that allow incorporation of local data.
3. Provide professional development for district and school staff on how to conduct their own data analysis.
4. Identify context-specific early warning signs and use the data to the fullest extent.

For District

1. Create data collection systems that allow schools to easily collect key early warning data.
2. Use data to identify students at each school who are at the highest risk of dropping out.
3. Support continuous data analysis at the school level, across schools, and district-wide.
4. Provide data collection and analysis training to school level staff.
5. Target district funding and resources to support schools in identifying students early, intervention strategies for at-risk students, and collaboration among high schools across the district or region.

6. Develop continuous improvement strategies, so that indicators can be refined to improve their predictive power in the local context.
7. Include the "on-track" indicator or a local adaptation of it as an accountability measure for the schools in the district (e.g., as done in Chicago Public Schools, see Allensworth & Easton, 2005).

For School

1. Develop or ascertain an early warning system based on evidence-based indicators (Heppen & Therriault, 2008; Heppen, O'Cummings, & Therriault, 2008).
2. Assign staff to create a plan to monitor indicators of risk over the course of the school year.
3. Identify and evaluate intervention strategies that support students most at risk for dropping out.
4. Use the data to tell the story and make the case for intervention programs/practices. For example, use the "on-track" indicator data to apply for additional local or state resources, to communicate needs, and identify common needs among at-risk students in the school.
5. Refine the early warning system indicators to reflect local context (see Jerald, 2006).

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Hiring and Evaluating External Partners

Center on Innovation & Improvement

External providers can provide critical expertise and capacity to states and districts committed to initiating dramatic school improvement efforts. States and districts may hire external providers to:

1. **Assess the needs of individual schools** to determine which model would work best in that school; hire an external provider to conduct school quality reviews or needs assessments;
2. **Develop a state- or district-wide structure to support dramatic improvement** (e.g., hire an external provider to develop a pipeline of skilled school turnaround leaders);
3. **Manage a state- or district-wide cluster of schools identified for turnaround** (e.g., hire an external provider to coordinate targeted assistance to a cluster of lowest performing schools);
4. **Operate individual schools identified to implement the restart model** (e.g., partner with a charter management organization or education management organization to operate the school); or
5. **Provide targeted technical assistance to build the state's or district's capacity for dramatic district and school improvement** (e.g., hire an external provider to recruit, select, and train individuals to serve as instructional coaches in schools identified for intervention or improve programs for students with disabilities).

Regardless of which of the above tasks the contractor is being asked to perform, there will be some commonalities among the various contracts. The Comprehensive School Reform Quality Center and The Finance Project (2006) provide criteria for assessing a prospective contractor's organizational and financial ability to perform the necessary work. Building on extensive contracting in the charter sector, the National Association of Charter School Authorizers (2005; 2009) has codified key steps to selecting and managing contracts with external service providers.

The foundation of the relationship between states or districts and external partners is a thoughtfully negotiated contract that articulates roles, responsibilities, performance expectations, and consequences for failure to meet expectations. Regardless of whether it is a state department of education or a district pursuing the relationship, a rigorous evaluation of the partner's capacity is essential to fully leveraging the potential expertise of external partners to support focused and dramatic school improvement efforts. As experience with Supplemental Educational Services has shown, this is not an insignificant undertaking; care in vetting the capacity and experience of external partners before engaging in a contractual relationship is essential, and correcting deficiency in performance or terminating contracts once executed is a painful process for all concerned.

Steps for States and Districts in Hiring External Partners

States and districts interested in hiring external partners to help with school improvement efforts need to establish structures that will allow them to recruit, select, establish relationship terms, manage, and evaluate the providers (Kowal & Arkin, 2005). Building on the lessons culled from hiring external providers to work in traditional as well as chartered public schools, the following steps provide a blueprint for states and districts interested in creating a rigorous system to attract, select, manage, and continuously evaluate external providers offering a range of school improvement services (Hassel & Hassel, 2005; Kowal & Arkin, 2005; National Alliance for Public Charter Schools, 2005; National Association of Charter School Authorizers, 2005; Rhim, 2004; 2005a; 2005b; 2009). These steps are important whether a state department of education or a local board of education is hiring the external provider:

1. Identify unambiguous reasons for hiring an external partner;
2. Engage stakeholders about the need to hire eternal providers and ensure the entire process is transparent and fair;

3. Articulate specific goals of the relationship with the external partner, including measurable expectations and criteria for selection of external partners to meet these goals;
4. Create conditions to attract multiple high quality external partners (e.g., extend key flexibilities, allocate adequate funds for external providers, infuse fairness and transparency into selection and accountability processes);
5. Budget adequate funding to support relationship with external partner for duration of contract;
6. Develop a rigorous process to select an external partner whose experience and qualifications match the specified goals (e.g., a written application, due diligence to confirm track record of success and financial stability, an in-person interview with the external provider's leadership team, and, if appropriate due to scope, a site visit to schools receiving services from the external partner);
7. Negotiate a contract outlining roles and responsibilities of the external partner as well as the district and relevant schools, and if applicable, state department of education, as well as explicit and measurable outcomes, including interim indicators of growth;
8. Provide support as needed and appropriate but do not micro-manage external partner;
9. Evaluate the external partner's progress toward goals; and
10. Define consequences for failure (e.g., termination or modification of contract).

Action Principles

For State

State departments of education are well positioned to *establish the conditions* for external providers to fill a distinct need in districts and schools as well as *hire external partners* for a variety of services.

1. Address policy barriers that might limit the role of the state education agency in such efforts.
2. Rather than asking individual districts to vet potential partners, state education agency staff should proactively identify qualified partners who meet certain standards and provide districts with a list of "approved" or "preferred" partners.
3. Provide assistance to district personnel by developing model selection procedures that assess multiple aspects of an external partner's performance.
4. Contribute to the evaluation of the effectiveness of an external partner by making certain that the state has high quality and coherent state assessment systems that provides districts with a nuanced understanding of overall school performance as well as growth of individual student sub-groups.
5. Create and adequately support a state-level office to identify specific schools for targeted assistance from external partners and thereafter recruit, select, establish relationship terms, manage, and evaluate the partners using the key action principles.

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Using Operational Data, Including Classroom Observations

Center on Instruction/Center on Innovation & Improvement

Student learning data tells us the results of the school's operations. To improve those results, we must also examine operational data. Operations include each teacher's delivery of instruction, but also teachers' instructional planning, their development and alignment of curriculum, and their teaming processes. Operations also extend to the support services provided for students, the curriculum and course offerings, the schedule, and the allocation of resources. In other words, the school's operations are seen in the daily practices of the adults in the building, the people with responsibility for students' learning. In order to make the adjustments in practice that lead to improved student learning, information about the school's operations must be examined alongside student learning data. Results for students improve when the adults in the school change what they do that influences student learning.

The quality of school operations can be assessed by rating practices using indicators of effective practice, rubrics, and examples of evidence. States and districts provide instruments and assessment/planning tools for school teams to engage in continuous improvement cycles through regular examination of their operational practices (Redding, 2006). See the Appendix for examples of indicators of effective practice from the Center on Innovation & Improvement and the National High School Center.

Enhancing the quality of instruction is a key to school improvement. To improve teaching quality, data on classroom instruction is essential. These data may focus on teacher behavior only or on the interaction of teacher and student behavior. The former is common for teacher appraisal and the latter is common for understanding how variations in teaching behaviors affect gains in student achievement (Foorman & Schatschneider, 2003; Smith, Dickinson, Sangeorge, & Anastasopoulos, 2002; Taylor, Pearson, Peterson, & Rodriquez, 2003).

In the latter case the observation may include questions about student engagement and the fidelity with which a particular curriculum is implemented. In both cases, the observation instruments must have adequate reliability and validity if they are to be used for decision making. Reliability can generally be increased by increasing the number of times the teacher is observed or by increasing the number of observers. In order for a measure to be valid, it must be reliable, i.e., replicable. Thus, the goal of measuring instruction of inferential comprehension strategies is only realized if inter-rater reliability is adequate (Gersten, Dimino, & Jayanthi, 2007).

Action Principles

For State

1. Provide districts and schools with standards and indicators of effective practice along with tools for self-assessment and planning for continuous improvement.
2. Use a classroom observation tool for monitoring schools in need of improvement, in corrective action, or undergoing restructuring; make it a part of the leadership plans for instruction.

For District

1. Maintain a district-level improvement team that engages in continuous examination of district practices, guided by standards and indicators of effective district practice.
2. Use a classroom observation tool for monitoring schools in need of improvement, in corrective action, or undergoing restructuring; make it a part of district leadership and instruction plans.

For School

1. Maintain a school improvement team that engages in continuous examination of school practices, guided by standards and indicators of effective district practice.
2. The administrative team might use a classroom observation tool to link data on instructional practices to students' achievement. These data can be used to inform decisions regarding teacher professional development and the need for additional instructional resources.

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Monitoring Fidelity of Implementation

Center on Innovation & Improvement

A model or program is a coherent and systematic assemblage of practices. Fidelity of implementation means adherence to both the proper execution of the specific practices and the effective coordination of all the practices as they are intended to be combined. A program or practice with demonstrated effectiveness in some schools can be ineffective elsewhere if the way it is being implemented takes it far away from its original (evidence-based) design. This variation in outcome has spurred a heightened interest in the science of "implementation." The experience with comprehensive school reform (CSR) models contributed greatly to this line of investigation. Even though CSR models are, by definition, "research based," they tend to produce different results in different contexts, and the variation in outcomes has often been attributed to differences in the fidelity of implementation (Berends, Bodilly, & Nataraj Kirby, 2002). "Only when effective practices are fully implemented should we expect positive outcomes. Implementation matters" (Blase & Fixsen, 2005, p. 10).

In recognition of this problem, researchers began focusing on the concept of *fidelity of implementation*, the delivery of content and instructional strategies in the way in which they were designed and intended to be delivered: accurately and consistently" (National Center on Response to Intervention, n.d., online).

Fixsen discusses what can happen when an effective program is not implemented properly and calls the result an "implementation gap." This gap can occur either when the program or practice, from the start, is not used with fidelity or when an originally "good" implementation "disappears with time and turnover" (2006, online). A U.S. Department of Education (2009) guide to implementation of research-based programs highlights the importance of ensuring that the core elements of a program are implemented as designed. These could include the basic program structure, content, and method of delivery.

Plans for monitoring fidelity of implementation should actually begin when programs are being considered for adoption. In general, "the more clearly the core components of an intervention program or practice are defined, the more readily the program or practice can be implemented successfully" (Fixen, Naoom, Blasé, Friedman, & Wallace, 2005, p. 24). Researchers have identified elements of programs that can impact fidelity of implementation. For example, programs that are "packaged" to simplify the tasks of implementation and programs that are a good match with the needs of the target population and school site are more likely to be implemented with fidelity (Getting Results, 2007).

In addition, a school's failure to put core elements in place could be the result of inadequate staff training and preparation or staff unwillingness to shift away from programs or practices with which they are comfortable. Thus, once a program has been selected, attention must be paid to preparing staff to implement the program by providing training, opportunities to practice, and coaching as needed (Guldbrandsson, 2008). Wallace et al. (2008) identify key "implementation drivers" that, when given sufficient attention, increase the likelihood that an instructional program will be implemented correctly. These include elements such as observations to ensure that the program is being implemented correctly, with intervention if necessary.

While careful program selection, planning, and staff preparation can make effective implementation more likely, continued monitoring is critical to ensure that the program or practice continues to be implemented as designed—and to assess the program's impact on student learning. Ongoing and "systematic data collection about implementation is needed. By determining which program components are firmly in place and which ones are only being given lip service, those managing the new program can learn about and address the barriers that are limiting or interfering with use [and help schools] fine-tune their efforts to make a program work" (Yap et al., 2000, p. 19). This ongoing assessment of fidelity of implementation also provides information critical to assessing whether it is the program or the implementation of the program that is the problem if the expected positive impact does not occur.

Action Principles

For State and District

1. Consider possible difficulties with implementation when selecting new programs and be ready to address the difficulties.
2. For any program implemented, state- or district-wide, provide comprehensive training and support materials for staff with opportunities for teacher practice and corrective feedback included in the training plan.
3. Develop "calibration checks" for teachers to use to monitor their own implementation (Gunn, n.d., online).
4. Include principals in training with emphasis on what the program looks like in practice so that principals can provide effective monitoring and feedback on an ongoing basis.
5. Develop a plan for monitoring implementation of the program that includes data collection, observation of the program as implemented, analysis of the data, and planning for ways to address off-target implementation or "poor-fidelity drift."
6. Use the data collected regarding fidelity of implementation in efforts to identify possible reasons for programs not performing as expected.

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Documenting and Reporting Progress to Inform Practice

Center on Innovation & Improvement

Targeted school improvement efforts focused on rapid change for the lowest performing schools need to establish early and tangible indicators of positive change. Absent clear evidence of progress, state and district leaders charged with directing school improvement efforts must require school leaders to examine their strategies and make necessary mid-course corrections. Identifying leading indicators of change and subsequently making necessary adjustments can significantly accelerate rapid improvement success rates (Hassel & Hassel, 2009).

Assessment results, at the classroom, school, district, or state level are established components of current federal and state accountability systems. Yet, annual assessments are a relatively blunt instrument. Furthermore, they don't provide school leaders or instructional personnel with timely information that can influence real-time school operations and classroom practice. Therefore, states and districts need to establish a systematic way of collecting and using a variety of information to inform its district and school personnel about whether positive progress is being made toward improving student learning.

There is not an established base of literature related to leading indicators of change, but lessons gleaned from the cross-sector research on effective turnaround initiatives and emerging research on statewide systems of support provide insight upon which states and districts can build unique leading indicator systems. Research on turnaround efforts inside and outside education indicates that effective turnaround leaders engage in a consistent set of actions that in combination drive dramatic improvement. Of note for leaders charged with documenting and reporting progress, successful turnaround leaders choose "a few high priority goals with visible payoffs and use early success to gain momentum, motivate staff, and dis-empower naysayers" (Kowal, Hassel, & Hassel 2009, p. 4). These wins focus on key leverage points that lead to dramatic improvements in school performance that will eventually be confirmed on state assessments. Examples of early wins that could serve as tangible indicators of positive change include: 1) boosting attendance and decreasing disciplinary rates in the first two months of the school year; 2) demonstrating significant increases in achievement as documented in formative assessments in a specific academic area such as "aiming by the end of the first semester to have 90 percent of fifth graders on track to make grade level by year's end (Kowal, Hassel, & Hassel 2009. p. 4). The converse of early wins are school conditions that predict later failure (Hassel & Hassel 2009). Potential examples of early indicators of failure are high mobility of strong teachers, persistent low staff morale, and ongoing or escalating school discipline issues.

In *Evaluating the Statewide System of Support with Rubrics, Explanations, and Exemplars*, the Center on Innovation & Improvement established 42 indicators to guide the development, implementation, and evaluation of each state's system of support. Examples of indicators are: 1) strong data system that district and school personnel can utilize to inform decisions that positively impact instruction and curriculum and 2) established process for using state assessment results to provide differentiated services for schools, especially those identified as continuously failing.

These early indicators are not the final measure of progress, but they serve as key evidence that school leaders are taking the steps necessary to lead to positive academic growth. Absent evidence of positive change, state and district leaders need to proactively assess the degree to which the specified change strategy is in fact changing the curriculum or instruction in the chronically low-performing school identified for corrective action. Rather than waiting three to five years for lack of or limited evidence of positive change, states and districts should encourage rapid retry of alternative approaches (e.g., replace turnaround leader or external provider) (Hassel & Hassel 2009).

Action Principles

For State

1. Identify indicators of positive change and pinpoint school conditions that predict later failure.
2. Provide districts with means to measure leading indicators (e.g., formative assessments or state data systems that allow districts to track student attendance and discipline referrals in real time).
3. Develop policies that encourage rapid retry efforts when rapid improvement efforts fail.
4. Provide political cover to districts tracking leading indicators of positive change and when necessary, engaging in rapid retry efforts.
5. Anticipate some failures on road to dramatic improvement and build a pipeline of school turnaround and transformation leaders, as well as external providers (e.g., charter management organizations and education management organizations).

For District

1. Track indicators of positive change and pinpoint school conditions that predict later failure.
2. Measure leading indicators (e.g., formative assessments or state data systems that allow districts to track student attendance and discipline referrals in real time).
3. Anticipate need to try again when rapid improvement efforts fail.
4. Engaging in rapid retry efforts when failure occurs, do not allow schools to languish for three to five years absent clear indicators of progress that will dramatically improve student outcomes.
5. Cultivate pipeline of school turnaround and transformation leaders as well as external providers (e.g., charter management organizations and education management organizations).

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Sustaining Reforms

Center on Innovation & Improvement

Districts and schools that have implemented change efforts and begun witnessing a positive trajectory in student achievement and other reform goals must implement structures and engage in processes and behaviors that produce a continuous improvement orientation (Redding, 2006). After a typical three-year implementation, "the deterioration of research-based practices adopted during the implementation period is often rapid or immediate" (Redding, 2006, p. 28). To prevent such deterioration, successful reform must not be viewed as the attainment of some plateau that is simply an improvement over what existed before, but as a point in ongoing adjustments aimed at achieving still higher goals. In many low-performing schools, some improvement, while laudable, still leaves many or most students academically disadvantaged. Also, the educational environment is always in flux: Leadership, teachers, staff, students, state-mandated academic standards, school and community demographics, and availability of community resources are subject to change. It is critical that these do not result in a reduction in student achievement.

Sustainability should be considered in the initial planning for the reform. During the planning, school leaders must communicate the need for the reform, identify resources and capabilities (including community partners) for sustaining it, and convey to the school community the appropriateness and the effectiveness of the (research-based) efforts. Further, leaders must anticipate changes in personnel, contraction of resources, or revisions to policy that would threaten the practices, structures, and attitudes that resulted in improved achievement. The reform plan should provide for contingencies that respond to such threats. From the beginning, the purpose and workings of the reform must be well understood by and have the support of school faculty and of the community and its leaders, including political leaders and the school board, in order to be sustained (Cawelti & Protheroe, 2007; Murphy, 2007; Wong, 2007). Engaging a wide representation of the community in the planning process is one way to help ensure long-term viability of the reform.

Given these multiple variables, leadership must take a "systems orientation" (Redding, 2007b) to maintaining positive outcomes. Given some change, leaders must ask what in the system can respond to or compensate for that change. In addition, in order to make good decisions about what needs to change, effective collection and use of data are key to sustaining improvement. Consequently, time dedicated to data analysis and planning by teams at the district and school levels should be sufficient, routine, and non-negotiable.

Behavioral change is the key to school improvement. Regulation can change organizations, but an effective change agent must also offer incentives, build capacities, and provide opportunities for the people in the system to learn and change (Redding, 2007a). To be fully realized and lasting, reform efforts must be accompanied by a fundamental cultural shift throughout the local education community, a shift that results in new mindsets and accompanying behaviors among administrators, teachers, and students. Such cultural changes will require ongoing support (CCSRI, 2009), and a degree of accountability, with incentives for positive change.

Action Principles

For State

1. Develop means to identify reforms worth sustaining (i.e., differentiate substantial progress leading to changes in outcomes from incremental process changes).
2. Allocate resources—human and fiscal—to support sustainability of reforms beyond years two and three.
3. Develop systems to document and codify successful and sustainable reforms.
4. Disseminate lessons learned from successful reforms.

For District and School

1. Invite faculty and community input in the planning stage and subsequently seek continued support and involvement of all stakeholders to ensure continuity of the reform effort.
2. Create contingency plans to address possible changes in staffing and resources.
3. Ensure that new staff is committed to adopting the reform measures.
4. Provide dedicated time and space for teams of educators to seek ways to maintain reforms and identify strategies for further improvement.
5. Provide professional development to educators on how to engage in ongoing problem solving, thereby establishing a culture geared toward continuous improvement.

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6

Human Capital–Personnel and Professional Development: Introduction

National Comprehensive Center for Teacher Quality

Critical to the turnaround or transformation of low-performing districts into high-performing learning systems is a robust human capital strategy at the district level that is coupled with high-quality interventions at the school level. Districts must be able to secure and retain a sufficient number of highly effective teachers and principals (their human capital) to ensure that their education systems can successfully deliver higher levels of student achievement.

Compared to other sectors, education lags behind in its efforts to strategically attract and retain top talent. Where other industries refer to a "war for talent" (MacMillan, 2008), the education field is far more subdued in its campaign for more high-quality educators and its actions to meet this goal. A joint study by the IBM Institute for Business Value and the Human Capital Institute found that, while attention to human capital practices varied substantially across industries, *the education field was found to be the least likely to engage in "enlightened talent management practices"* [emphasis added] (Ringo, Schweyer, DeMarco, Jones, & Lesser, 2008, p. 9).

This lack of prioritization of educator talent management is especially unfortunate given that research consistently finds teachers to be the most important school-level factor that affects student achievement, with school leaders being the second most influential contributor to student success. Despite the centrality of excellent teachers and principals for student growth, far too often shortages of effective staff exist. This longstanding problem is especially prevalent in certain subjects, such as mathematics, science, and special education, and certain locations, including rural and urban areas. Typically, these shortages stem not from a paucity of teachers being produced through preparation programs, but rather from pre-retirement attrition from schools. Such attrition is worst in small, high-poverty schools in urban and rural locations (Ingersoll & Perda, 2009). There is also evidence that new teachers in special education are more than twice as likely as other teachers to leave the profession (Butler, 2008). The financial cost of teacher attrition and movement from school to school—underwritten in large part by the American taxpayer—is nearly $5 billion annually across the country (Alliance for Excellent Education, 2005).

A systemic process of comprehensive support must be in place for low-performing schools and districts to attract, develop, and retain effective educators for all learners. A systemic approach involves addressing the whole spectrum of educator quality policies across the educator's career continuum (Behrstock & Meyer, 2009). This includes educator recruitment and hiring, induction and ongoing professional development, opportunities

for career growth, compensation and incentives, and performance management. Leaders at the district and school level must collaboratively work to align educator quality policies to ensure that a systemic process of support is in place.

In the briefs that follow, resources are provided to support the following approaches to improving human capital:

1. Recruiting staff and attracting high-quality staff to hard-to-staff schools
2. Improving staff evaluation systems
3. Performance-based incentives
4. Differentiating roles, re-assigning staff, and aligning staff competencies with school/student needs
5. Retaining staff
6. Providing career growth ladders
7. Providing professional development

Each of these approaches is outlined in more detail below, along with supporting resources. Local leaders who genuinely support school transformation and are determined to impact, improve, and advance educator quality policies and practices must invest heavily and take deliberate action in the systemic management of the district's most important resource: effective teachers and school leaders.

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Recruiting Staff and Attracting High-Quality Staff to Hard-to-Staff Schools

National Comprehensive Center for Teacher Quality

Many schools, particularly hard-to-staff schools, continually face difficulties in recruiting enough effective teachers and school leaders for all students. Attracting high-quality staff has traditionally been especially problematic for rural and urban schools and for certain subject areas (e.g., mathematics, science, foreign languages, and special education). These subject- and geographic-specific recruitment problems result in less rigorous educational experiences for all students affected. These shortages also contribute to an inequitable distribution of teachers between high- and low-need student populations; research consistently finds that students from poor and minority backgrounds have less access to highly qualified and experienced teachers than do their peers from low-poverty, non-minority backgrounds (Imazeki & Goe, 2009).

To more successfully recruit effective educators for all students, districts must actively and strategically market their strengths (e.g., attractive compensation packages or working conditions), develop high and unyielding standards for the identification and selection of candidates, and aggressively reach out to all possible candidate pools when recruiting for difficult-to-staff positions (Guarino, Santibanez, & Daley, 2006; Simmons et al., 2007; Spradlin & Prendergast, 2006). Districts must address some of the hidden costs of teaching in hard-to-staff areas; for example, although the cost of living in rural areas tends to be comparatively low, the lack of public transportation, suitable housing, and other services may require teachers to spend more than they would otherwise have to on an automobile, home ownership, and other expenses. In addition, the recruitment and hiring phases should be information-rich. An information-rich recruitment and hiring process allows employers and applicants to collect detailed information over time through interviews and exchanges, so as to form accurate impressions of one another. This enhance the likelihood that both the employer and teachers' expectations will be met, thereby minimizing the risk of premature attrition (Liu & Johnson, 2003).

Action Principles

For District

1. Identify the characteristics of the district and its schools that are attractive to teachers and seek to both market and build upon them to recruit new staff.
2. Identify schools within the district that have challenges in teacher recruitment.
3. Establish recruitment goals in terms of teacher quality and quantity for the district as a whole.
4. Establish recruitment goals in terms of teacher quality and quantity for high poverty and high minority schools to ensure that students in those schools do not have unequal access to high-quality teachers.
5. Develop and sustain partnerships with universities and community colleges that deliver teacher preparation, particularly for the recruitment of teachers in high-need areas, such as teachers of students with disabilities and English language learners.
6. Create programs to recruit former teachers, including those recently retired, and ensure that policies related to teacher retirement do not prohibit these actions.
7. Establish "grow-your-own" programs to recruit future educators from the pool of current high school students, paraprofessionals, teacher aides, and community members.
8. Provide financial incentives (e.g., salary increases, bonuses, housing assistance, etc.) for educators willing to work in high-need schools or subject areas. This strategy might include incentives for general education teachers to switch to special education, teaching English language learners, or becoming certified in other high-need subjects.
9. Alter hiring procedures and budget timelines to ensure that the appropriate number and types of teachers can be recruited and hired before they seek employment elsewhere.

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Improving Staff Evaluation Systems

National Comprehensive Center for Teacher Quality

Evaluating staff is a critical component in an effective performance management system and should be connected to other areas of educator talent management and support. In particular, a rigorous approach to evaluation should be clearly connected to a district's system for providing professional development so that growth opportunities are well-aligned with teachers' and school leaders' areas of weakness (Milanowski, Heneman, & Kimball, 2009). Where evaluation systems are tied to compensation or other high-stakes outcomes, it is especially important that they be accurate, fair, linked to growth opportunities, and fully transparent.

Too often teacher evaluations are too lenient, fail to adequately differentiate between teachers at different levels (Weisberg, Sexton, Mulhern, & Keeling, 2009), or to differentiate among teachers based on specialized roles and specific contexts (Chait, 2009; Toch & Rothman, 2008). To be effective, teacher evaluation systems must be well understood by teachers and should result in the identification of genuine differences in performance (Danielson & McGreal, 2000; Milanowski, Prince, & Koppich, 2007).

Implementing an effective evaluation system involves including individuals with significant, recent experience in the classroom as evaluators. Everyone involved in the evaluation process should undergo training in the use of the assessment instruments including the use of classroom observations, portfolio reviews, or whatever other methods are employed. In addition, evaluations should be conducted frequently, using multiple measures, in order to gain a comprehensive and accurate picture of a teacher's competencies. Those responsible for conducting the evaluation should provide immediate formative feedback. At the very minimum, all teachers should be evaluated annually, but more frequent evaluations should take place in cases where teachers are found to be under-performing (Mathers, Oliva, & Laine, 2008).

School leaders must also be evaluated. Their evaluations should be based on clear standards and objective criteria that are a matter of description and not conjecture. They should be honest, helping leaders to identify strengths as well as weaknesses. They should be reciprocal and empowering, providing school leaders with a chance to give feedback to the district and to shape the decisions that will improve their effectiveness (Reeves, 2009). For both teachers and school leaders, the evaluation system must be monitored for its perceived usefulness and to guide revisions to the evaluation process.

Action Principles

For District

1. Include multiple people in conducting evaluations. They should have experience in the classroom and should include individuals with expertise in the subject or grade level of the teacher being evaluated.
2. Provide high-quality training for those conducting evaluations.
3. Incorporate teacher self-reflection and personal goal-setting in the evaluation process.
4. Evaluate a variety of teacher skills and knowledge, using a variety of valid and reliable evaluation tools (for examples of such tools, see A practical guide to evaluating teacher effectiveness).
5. Require evaluators to provide timely, clear, and constructive feedback.
6. Link the evaluation process with the district's collective and individualized professional development programs.
7. Use the evaluation results to differentiate among educators when granting leadership opportunities and making other decisions (See performance-based incentives).
8. Differentiate among teachers at different stages in their careers, in specialized roles, or working with at-risk students and students with special needs. Consider teaching context when deciding upon which instruments to adopt and when determining how to use the results of the evaluation.

9. Develop a review process and communication plan to gauge teacher and administrator perceptions and concerns about the evaluation system and revise the system as necessary.
10. Standardize and document the evaluation process.
11. Evaluate the performance of school leaders in a similar manner.

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Providing Performance-Based Incentives

National Comprehensive Center for Teacher Quality

An increasingly popular local reform strategy to supplement teacher pay and increase shared accountability for student results is to design and implement a performance-based incentives program. Performance-based incentives typically are monetary and may apply to individuals or be based on the collective performance of all staff in the school. Although the evidence on the impact of performance-related incentives on student learning is only starting to emerge, early figures indicate a range of results, including no significant effect (Springer et al., 2009), positive impact on student achievement on high-stakes mathematics tests (Vigdor, 2008), and some positive gains in student achievement scores at the elementary level, although effects may drop off in later years (Springer et al., 2008). In addition, a more consistent finding is that performance-based incentives lead to teacher retention in targeted schools (Springer et al., 2009). Further, there is evidence that the traditional resistance among teachers to differentiated pay is subsiding. A recent study finds that Generation Y teachers (e.g., those born between 1977-1995) are more open to differential pay than are their more veteran counterparts, and that between half and two-thirds of teachers from all age groups support pay incentives for teachers who achieve National Board Certification, take on difficult assignments, put in more effort, or consistently receive high ratings from their principals.

To be effective, performance-based incentive systems should involve significant teacher input at each stage of development and implementation, set clear performance goals, use multiple measures of teacher performance, provide monetary incentives that are large enough to affect teacher behavior, be sustained with resources available over the long-term, and be subject to rigorous evaluations of program implementation.

Action Principles

For District

1. Base performance incentives on multiple measures of strong performance.
2. Ensure that valid data are available on whether performance indicators have been met.
3. Decide whether to award individual or school-wide performance incentives.
4. Create a system for making awards that is transparent and fair.
5. Determine the amount of the incentives, based on budgetary considerations and consideration of what is needed to be effective.
6. Work with teachers and teachers' union at each stage of development and implementation.
7. Secure sufficient funding for long-term program sustainability.
8. Develop and implement a communication plan for program clarity and building stakeholder support.

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Differentiating Roles, Re-assigning Staff, and Aligning Staff Competencies with School/Student Needs

National Comprehensive Center for Teacher Quality

It is important that teachers and other staff be assigned to classes and to schools whose needs are appropriately aligned with their professional competencies. Doing this serves two purposes. First, it makes teachers more content in their profession, lowering mobility and attrition. According to the 2000-2001 Teacher Follow-up Survey, 40% of public school teachers who moved to a new school did so for an opportunity for a better teaching assignment (Luekens, Lyter, Fox, & Chandler, 2004). Second, it helps to ensure that all students, regardless of their background, have equal access to experienced, highly qualified teachers, a situation that currently is often not the case (Clotfelter, Ladd, Vigdor, & Wheeler, 2006; Imazeki & Goe, 2009).

At the minimum, all teachers should be assigned only to classes within their area of licensure or otherwise demonstrated area of expertise. Teachers with foreign language or other unique skills should be strategically assigned to work with students and in communities where their skills and knowledge are needed. Ideally, teachers in their first years on the job should be assigned a lighter workload in terms of numbers of classes, fewer administrative duties, lower class size or student load, and a lesser concentration of students with special needs or behavioral problems (Johnson et al., 2004). This approach will give new teachers time to hone their skills and improve their effectiveness before they are solely responsible for a large group of students. To make successful assignments, building leaders should examine the backgrounds, evaluation findings, and track records of each member of the school faculty and thoughtfully and collaboratively construct the school schedule to match teachers with the classes or course sections in which they (and their students) are most likely to be successful. Adjustments and corrections may need to be made mid-year, but these can be minimized if initial teacher assignments are conducted strategically with an eye to student learning results.

Moreover, the unique skills of all staff should be recognized and maximized through the use of collaborative teamwork that allows teachers to learn from and build off of each other's competencies. For example, the Generation Schools model rearranges teachers' assignments and incorporates team-based planning to bring shared expertise to teaching activities (Silva, 2009). As staff advance in experience and expertise, their roles should be differentiated to reflect their skills, knowledge, and career goals, and accomplished teachers should be recognized and provided with continual learning experiences. Teacher leadership positions, including mentors, instructional coaches, and school administration, should be available to interested and skilled educators. Where possible and when desired, these positions should provide leaders with the option of advancing their careers while also maintaining some classroom teaching responsibilities.

Finally, the needs of students should be the first priority of districts when assigning teachers. While local collective bargaining rules may require seniority-based placements as the priority, principals and district leaders should bear in mind that assigning inexperienced teachers to the most challenging classrooms or schools is likely to negatively impact student learning as well as the retention of the less experienced teaching staff. Teachers who consistently fail to help students learn should be removed from the classroom. Districts can facilitate this process by negotiating expedited performance-based dismissal processes, particularly in low-performing schools, and supporting school leaders by advising them on effective dismissal procedures and providing an intervention team to assist with the dismissal process (Kowal, Rosch, Hassel, & Hassel, 2009). In addition, districts should actively facilitate, through incentives and other measures, the assignment and re-assignment of staff to ensure that the needs of students and schools can be met by the various roles, responsibilities, and competencies of the staff employed. The success of differetiating roles and making appropriate teacher assignments should continually be evaluated for their impact on student achievement.

Action Principles

For District

1. Review alignment between teacher assignment and licensure area and ensure that, at a minimum, all assignments are within licensure areas or teachers otherwise demonstrate their expertise in the subject in which they are assigned.[1]
2. Assign novice teachers to classes appropriate for their experience level.
3. Provide a variety of formal teacher leadership positions that do not require leaving the classroom.
4. Actively re-assign teachers to ensure that at-risk students are not disproportionately taught by inexperienced or ineffective teachers, providing transfer incentives if needed.
5. Provide teachers an active role in the design and implementation of strong induction and mentoring programs.
6. Provide teachers opportunities to become peer coaches and/or facilitators of staff development.
7. Capitalize on the problem solving and data analysis skills of special educators/consultants to lead/facilitate team meetings.
8. Carefully consider staff's unique competencies and assign them to positions where these skills are.
9. Evaluate the success of assignment decisions.

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[1]At the minimum, the essential criteria for highly qualified teacher (HQT) status must be attained: (1) a bachelor's degree or better in the subject taught; (2) full state teacher certification; and (3) knowledge in the subjects taught.

Retaining Staff

National Comprehensive Center for Teacher Quality

Approximately 46% of all teachers leave the profession within their first five years (Ingersoll, 2003). The problem is intensified for teachers in high-need areas. In some schools, over a five year period, as much as 85% of the teaching staff will have left (Allensworth, Ponisciak, & Mazzeo, 2009). Meanwhile, new special education teachers are two and a half times more likely to leave their profession than are teachers in other disciplines (Butler, 2008). Teacher attrition from the profession and movement from school to school together costs the country more than $4.8 billion annually (Alliance for Excellent Education, 2005). In addition, attrition prevents schools from creating communities where teachers know students and their needs well. No single factor causes high attrition levels, and some attrition is certainly appropriate (e.g., in cases of teacher ineffectiveness) or unavoidable (e.g., attrition due to family or other personal reasons). But to the extent that frequent turnover in the existing talent pool is the result of teacher dissatisfaction with the profession, districts should address the issues that teachers claim affect their decisions to remain in a school or in the profession: salaries, school leadership support, working conditions—including student disciplinary and motivation problems, beginning teacher induction programs, and staff collegiality (Borman & Dowling, 2008; Ingersoll & Smith, 2003). New special education teachers cite inadequate support and Individualized Education Programs (IEPs) with the related paperwork among the primary factors for leaving, while the tremendous pressure to increase English fluency while meeting annual yearly progress requirements impacts ELL teacher retention (Billingsley, 2003; Solis, 2004; Westat, 2002).

Some of these conditions may be addressed simply by creating an open and trusting atmosphere, while others require substantial resources. Because a primary factor affecting teacher retention is a teacher's feelings of effectiveness, many investments in improving teacher effectiveness simultaneously improve teacher retention. For example, in a survey of new teachers it was found that the most commonly cited way to improve the quality of teaching is training teachers to differentiate their instruction to meet the diverse needs of learners and equipping teachers with sufficiently small class sizes to apply these differentiated approaches (Rochkind, Ott, Immerwahr, Doble, & Johnson, 2007). By improving student engagement and behavior, effective differentiated instruction also improves teacher retention.

Since more than two-thirds of teachers from Generation Y (i.e., born between 1977-1995) intend to remain in the classroom for at least the next ten years, there is some reason to be optimistic (Coggshall, Ott, Behrstock, & Lasagna, 2009). But districts must actively work to create the leadership supports, collegial cultures, compensation packages, and opportunities to expand one's horizons that are attractive to both highly talented Generation Y and more veteran teachers.

Action Principles

For District

1. Equip teachers with the competencies to apply evidenced-based practices in differentiating instruction and classroom management.
2. Provide training for school leaders in providing instructional leadership and supporting teachers with disciplinary matters.
3. Maintain safe, clean, adequately-resourced school buildings, with particular attention to providing sufficiently small class sizes and support staff, so as to enable effective classroom organization and behavior management.
4. Provide teachers with opportunities for differentiated career tracks and opportunities for growth.
5. Establish reliable, valid, and fair evaluation systems that have the capacity to differentiate among teachers based on specialized roles and are linked with provisions and opportunity for strong professional growth and development.

6. Provide new teachers with formal high quality, data-driven induction that starts prior to the beginning of the academic year and responsive, multi-year mentoring supports aimed at enhancing new teachers' instructional practice.
7. Collaborate with higher education on effective, responsive professional development.
8. Maintain accurate personnel and retention data. Collect and analyze data to support efforts to improve retention.

For School

1. Create a school atmosphere that features trust, professionalism, and shared leadership.
2. Foster a positive, collaborative, and team-oriented school culture.
3. Consistently apply the school's or district's evaluation protocol.
4. Differentiate administrative support for teachers based on experience level and individual needs.
5. Provide adequate planning time for teachers. Structured, collaborative time for teachers in co-teaching roles should be established.

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Providing Career Growth Ladders

National Comprehensive Center for Teacher Quality

Research finds that many teachers leave the profession because they feel stifled by a flat career trajectory that prevents them from making a difference beyond their classrooms. This is the case even more so for the incoming cohort of teachers (Berg, et al., 2005). A recent survey of Generation Y teachers (i.e., those born between 1977-1995) found that nearly all Generation Y teachers planned to remain in the education field for life, but only half of them wished to remain classroom teachers for life (Coggshall, Ott, Behrstock, & Lasagna, 2009). Teachers, particularly as they reach the second stage of their careers (i.e., the decade after tenure), wish to continually explore new challenges and growth opportunities while at the same time keeping one foot in the classroom.

Providing career growth ladders for teachers has multiple meanings in policy and practice ranging from a series of advancement opportunities for teachers both in and outside the classroom as well as tiered approaches to licensure. True career ladders recognize the progression from novice teacher status to proficient, professional, and eventually master or expert teacher status. Each phase of growth comes with changes in teachers' responsibilities, expectations, supports, and rewards. An example of such a career growth ladder is the Teacher Advancement Program (TAP). The TAP model differentiates between career, mentor, and master teachers, who, based on their individual interests and abilities, are held to differentiated standards, compensated differentially, and take on decision-making responsibilities as part of a school's Leadership Team (Teacher Advancement Program Foundation, n.d.). Teacher career growth ladders may include such teacher leadership positions as mentor, coach, or specialist. Incentives or leadership responsibilities based upon achievement of National Board Certification can also contribute to a meaningful career trajectory for teachers. Career growth ladders may also extend to non-teacher staff, such as paraprofessionals and teachers' aids. Through the use of "grow-your-own" programs, these staff members can be encouraged to become teachers, particularly in areas where there are shortages (Fritz, Cooner, & Stevenson, 2009; Mollenkopf, 2009). Because non-teacher school staff are already acquainted with the community and often know its culture and needs well, providing resources and support for their teacher training is often a worthwhile investment (Hayes, 2009).

Action Principles

For District

1. Define the expectations and responsibilities of different positions along a career ladder.
2. Create a system of incentives, including monetary and non-monetary rewards, to encourage teachers to advance along this career path.
3. With their input, customize career ladders for individual teachers, based on their interests and skills.
4. Advertise the career ladder at the time of recruitment to increase interest in the district.
5. Create a "grow-your-own" teacher preparation program to assist paraprofessionals and teachers' aids in becoming teachers, especially for high-need areas like math, science, and special education.
6. Establish a system to evaluate teacher retention and satisfaction with the various career advancement opportunities.

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Providing Professional Development

National Comprehensive Center for Teacher Quality

Teachers often acknowledge that the professional development they receive is of limited usefulness to their daily work and to their professional growth. Districts must work to create systems of professional development that genuinely advance the effectiveness of their staff for the benefit of both staff and students. According to the National Staff Development Council's *Standards for Staff Development* (2001), professional development should be standards based, results driven, and job embedded (e.g., formal or informal professional development conducted during the school day as educators engage in their daily work activities). Professional development programs should extend beyond traditional workshops to include activities such as peer observation, mentoring, the creation of teacher portfolios, action research projects, whole-faculty or team/department study groups, curriculum planning and development, literature circles, critical friends groups, data analysis activities, school improvement planning, the shared analysis of student work, lesson study, or teacher self-assessment and goal-setting activities. Professional development activities should be collaborative but also differentiated to meet the individual needs of teachers (Chambers, Lam, & Mahitivanichcha, 2008).

District professional development systems and requirements should be aligned with staff evaluation systems. They should be guided by formative teacher evaluation data as well as formative and summative student assessment data to create individualized professional development that will address a teacher's specific challenge areas. Professional development also should be linked to opportunities for career advancement, and provide opportunities for teachers to be involved in its selection and delivery. Finally, professional development should be aligned with school and district vision, mission, and improvement goals (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009).

Districts should consider high quality professional development in the following areas:

- **Developing a deeper understanding of the community served by a school**. Because at-risk schools and districts often struggle with teacher retention and student achievement, targeted professional development should be provided for teachers in these schools that is focused on understanding the community culture and the specific special needs of students. This professional development might include training in communication and linguistic differences, strategies for overcoming language barriers for English language learners, dealing with gangs (in certain communities), engaging parents, and equipping teachers with a better understanding of and comfort with the home backgrounds of their students.
- **Developing subject-specific pedagogical knowledge.** Professional development should be provided in content areas where children often under-perform and where teacher shortages sometimes result in underqualified instructors being hired. Mathematics, science, and foreign language instruction often benefit the most from such targeted professional development.
- **Developing leadership capabilities.** Ongoing opportunities for school leaders to engage in professional development should be provided by the district. As is the case for teacher learning, professional development for school leaders should be ongoing, job-embedded, and differentiated to meet the needs of individual principals and other school leaders (Goldring, Camburn, Huff, & Sebastian, 2007; Portin, Alejano, Knapp, & Marzolf, 2006). This approach may involve coaching, mentoring, reflection, and self-assessment. Through professional development, school leaders are often better equipped to promote collaboration among principals, teachers, and other school and district personnel and to create opportunities for staff to share in leadership responsibilities and develop and demonstrate leadership potential (Hargreaves & Fink, 2006; Salazar, 2007).

Finally, the effectiveness of professional development activities for all staff should be monitored. Data on the extent to which professional development changes instructional practice should be collected and used to make future decisions about the professional development offered. Making this determination involves first clarifying the desired outcomes of professional development and then assessing whether these have been achieved (Borko, 2004).

Action Principles

For District

1. Ensure that professional development activities are based on student data and other teacher evaluation information.
2. Ensure that professional development programs are based on strategies supported by rigorous research.
3. Align professional development requirements with state and district standards, assessments, and goals.
4. Provide all staff high quality, ongoing, job-embedded, and differentiated professional development.
5. Provide staff ample time for formal, structured collaboration and reflection.
6. Incorporate principles of adult learning into professional development activities.
7. Structure professional development that facilitates active learning and provides sustained implementation support.
8. Establish a system for evaluating the quality of specific professional development providers and work only with those providers considered of high quality.
9. Set goals for professional development success and monitor the outcomes of professional development investments.

For School

1. Create a professional learning community that fosters a school culture of continuous learning.
2. Promote a culture in which professional collaboration is valued and emphasized.
3. Ensure that school leaders act as instructional leaders, providing regular, detailed feedback to teachers to help them continually grow and improve their professional practice.

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7

Curriculum and Instruction: Introduction

Center on Instruction/National High School Center

Many curriculum and instruction strategies can lead to school reform and improved student learning. Student performance data are integral to both; large group student data identify and support the implementation of research-based instructional programs, while student- or class-level data inform instructional changes that serve the academic needs of individual students. Data can be used to confirm whether instructional programs align with state academic standards, and ensure vertical alignment among grade levels.

Data systems should allow for the collection, interpretation, and use of data to drive instructional change at the classroom, school, district, and state levels. Additionally, data about teachers' instructional practices can help determine the fidelity of implementation in instructional programs and can supply information about professional development priorities.

Among some of the specific curriculum and instruction strategies schools might consider with an eye toward comprehensive instructional reform are:

- *Response to Intervention*, which is a multi-level instructional framework. It includes the use of universal screening for all students as well as core instruction. Students demonstrating a need for support receive increasingly intensive interventions and ongoing progress monitoring.
- *Differentiated instruction*, an instructional approach in which a teacher incorporates an array of research-based instructional and organizational practices as a means to accommodate student differences in learning.
- *Accelerated instruction*, a strategy especially useful in reading and mathematics instruction. Rather than the slow-paced and reduced curriculum that remediation models have used, in this strategy teachers accelerate instruction of students to help them overcome educational deficits and "catch-up" to their peers. The successful use of this strategy increases the likelihood that even struggling students will be prepared to enroll in challenging grade-level courses.
- *Incorporated technology* has recently received attention for its potential to support instruction in all content areas and for all grade levels.

At the high school level, curriculum and instruction are geared toward preparing students for postsecondary success. While the topics in this chapter have implications for all K-12 grade levels, four strategies specific to high

school are addressed: (1) accelerating instruction of basic reading 9-12; (2) accelerating instruction of basic math 9-12; (3) providing advanced coursework; and (4) implementing competency-based instruction.

Students who enter high school as struggling readers will most likely have a harder time in content area classes, not just in English/language arts. Most high school teachers assume students have sufficient reading comprehension levels and strategies that allow them to learn content in all classes. However, data now suggest this assumption is incorrect. High schools must provide basic instruction in reading and embed literacy strategies in all content area classes for every student to master high school content. Similarly, providing accelerated instruction in mathematics is essential for students who enter high school several grade levels behind. At the same time, high schools are challenged as they also seek ways to provide all students with more opportunities to enroll in advanced coursework.

This chapter closes with a discussion about implementing competency-based instruction, the fourth high school-specific strategy about non-traditional strategies for students to demonstrate content mastery.

Aligning Instruction (Vertically and to Standards)

Center on Instruction

If students are to demonstrate proficiency on state standards, cognitive demand and classroom content must align to standards and assessments (Bhola, Impara, & Buchendahl, 2003). Alignment of curriculum, assessment, and instruction requires analysis of standards, policies, and practices in states, districts, schools, and classrooms (LaMarca, Redfield, & Winter, 2000; Martone & Sireci, 2009; Porter, Smithson, Blank, & Zeidner, 2007). Alignment of instruction links the content of state standards and district curriculum frameworks (the intended curriculum) with what is actually taught in the classroom (the enacted curriculum) (English, 1980; Blank, Porter, & Smithson, 2001). Processes for alignment vary in complexity and evidence of effectiveness (Bhola, Impara, & Buchendahl, 2003; Porter, Smithson, Blank, & Zeidner, 2007).

In all cases, for teachers to identify and activate the explicit connections between instruction and standards, and therefore improve student performance, they must be involved in the process of making those alignments. (Applebee, 1996; Koppang, 2004; Langer, 2001).

When instruction that is aligned to standards is implemented in classrooms, students should be able to perform at higher levels of proficiency on assessments. Analysis of student performance data can then become a useful tool to provide powerful guidance when schools make resource allocations, introduce changes in curricular emphasis, establish connections across grades and content areas, select instructional materials, and develop processes for building professional capacity (Bhola, Impara, & Buchendahl, 2003; Gamoran, Porter, Smithson, & White, 1997; LaMarca, Redfield, & Winter, 2000; Blank, Porter, & Smithson, 2001).

Action Principles

For State

1. Provide guidance about the alignment between state standards and assessments (e.g., areas of emphasis, cognitive demand, use of data to determine degree of alignment of instruction to standards) and provide examples, release test items, and disseminate policy interpretation (Bhola, Impara, & Buchendal, 2003; LaMarca, Redfield, & Winter, 2000; Porter, 2002).

For District

1. Provide support (technical, expertise, and resources) for an alignment process that considers resources, local context, and intended outcome (Bhola, Impara, & Buchendahl, 2003; Porter, Smithson, Blank, & Ziedner, 2007).
2. Support capacity-building for school staff and faculty members to help them understand the analysis and make strategic plans to implement action steps to address instructional adjustments and needed resources (Bhola, Impara, & Buchendahl, 2003; LaMarca, Redfield, & Winter, 2000; Porter, Smithson, Blank, & Ziedner, 2007).

For School

1. Conduct investigation to align school/teacher enacted curriculum, state standards, and local curricula, including articulation across grade levels and content areas (Bhola, Impara, & Buchendahl, 2003; Blank, Porter, & Smithson, 2001; English, 1980; Glatthorn, 1999; Kurz, Elliot, Wehby, & Smithson, 2009; McGehee & Griffith, 2001; Porter, Smithson, Blank, & Ziedner, 2007).
2. Provide resources (e.g., time, expertise, planning support, professional development) to enable teachers to incorporate changes required to align instruction with standards (Blank, Porter, & Smithson, 2001; English, 1980; Koppang, 2004).
3. Build capacity to monitor and maintain alignment between curriculum standards and classroom instruction, including use of formative data (Blank, Porter, & Smithson, 2001).

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Differentiating Instruction

Center on Instruction

Differentiating instruction allows classroom teachers to provide effective instruction to all students. Differentiating instruction is a not a single strategy or practice but rather an approach that utilizes research-based instructional and organizational practices to accommodate student differences in the classroom. Teachers can differentiate instructional content, process, product, and/or learning environment based on student readiness, interest, and/or learning profiles (Tomlinson, 2001) to respond to the unique needs of each student. Some examples of differentiated instruction include: using various grouping practices such as small groups, pairs, and one-on-one instruction; modifying assignments so that all students can participate in learning; providing opportunities for students to respond in multiple ways including writing, orally, and by providing responses to peers; and using effective instructional strategies such as reteaching, using multiple examples, and teaching strategies for how to read, complete math problems, or remember content.

Action Principles

For District

1. Provide professional development on differentiated instruction for classroom teachers.
2. Utilize coaching methods to support teachers as they learn to implement differentiating instruction in their classrooms (Newman & Singer, n.d.).

For School

1. Continually assess students to obtain valid data and use this student data to inform instructional decisions and determine appropriate grouping patterns (Tomlinson & Allan, 2000; Tomlinson, 2001; Moon, 2005).
2. Use grouping strategies to meet the individual needs of students within the broader group context and design instructional tasks for each group to align with educational goals (Hall, 2002).
3. Use differentiated instructional strategies to include special education students in the general education curriculum (Boderick, Mehta-Parekh, & Reid, 2005) and to respond to the unique needs of diverse gifted learners (VanTassel-Baska & Stambaugh, 2005).
4. Use student-centered activities (SCAs) to differentiate reading instruction for elementary students (Kosanovich, Weinstein, & Goldman, 2009).

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Using Student Data to Drive Instruction

Center on Instruction

The *Using Student Achievement Data to Support Instructional Decision Making* practice guide published by IES defines data-based decision making as "…teachers, principals, and administrators systematically collecting and analyzing various types of data, including demographic, administrative, process, perceptual, and achievement gap, to guide a range of decisions to help improve the success of students and schools" (pp. 46). A number of activities and decisions undertaken by schools and districts involve data-based decision making, such as screening students for placement, using progress monitoring or formative assessments to determine curricular changes, and interpreting annual performance data to identify areas of weakness for future educational focus.

Data systems allow for the collection, interpretation, and use of student data. A universal screening system can be used at the beginning and middle of the school year to identify students who are academically on-track and those who are at-risk for difficulties in key critical content areas, such as reading and mathematics (Gersten, Beckmann, Clarke, Foegan, Marsh, Star, & Witzel;. 2009; Gersten, Compton, Connor, Dimino, Santoro, Linan-Thompson, & Tilly, 2008). At-risk students can be selected to receive research-based interventions. Schools can then use progress monitoring data (collected on a frequent basis) to gauge the students' progress (or response to an intervention) towards critical academic outcomes (Tilly, 2008). Formative assessments can be collected in classrooms to give teachers feedback about students' understanding of the material presented and what minor adjustments to their instruction may be needed to improve students' understanding.

Employ the use of data systems in broader decision-making by utilizing annual state testing results to evaluate the effectiveness of their instructional systems. For example, a district may implement a new core reading series and analyze state testing results to determine if the new reading series is increasing student outcomes, or they may look at areas of poor performance in state testing results to determine where to allocate professional development dollars.

Action Principles

For District

1. Develop a data system or adopt an available data system that enables analysis of student outcomes at multiple levels (Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009).
2. Develop a district-wide plan for collecting, interpreting, and using data. Dedicate time and develop structures for district schools and teachers to use data to alter instruction (Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009).
3. Train teachers and principals in how to interpret and use data to change instruction (Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009).
4. Use annual state testing performance data to evaluate the overall effectiveness of instructional services provided by the district. Conduct deep analysis to determine areas in need of improvement (Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009).

For School

1. Identify which students are at risk for difficulties with certain subjects, such as mathematics or reading, and provide more intense instruction to students identified as at risk (Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009; Gersten, Beckmann, Clarke, Foegen, Marsh, Star, & Witzel, 2009; Gersten, Compton, Connor, Dimino, Santoro, Linan-Thompson, & Tilly, 2008).
2. Employ efficient, easy-to-use progress monitoring measures to track the progress of students receiving intervention services towards critical academic outcomes (National Center on Response to Intervention, n.d.; Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009; Gersten, Beckmann, Clarke, Foegen, Marsh, Star, & Witzel, 2009; Gersten, Compton, Connor, Dimino, Santoro, Linan-Thompson, & Tilly, 2008).

3. Use formative assessments to evaluate learning and determine what minor adjustments can be made to instruction to enhance student understanding (The National Center for Fair and Open Testing, 2007).

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Using Instructional Practice Data to Alter Strategies

Center on Instruction

Large-scale efforts to improve professional development for practicing teachers have emerged in recent years. Administrators face the central question "What decisions will create positive changes in classroom practice?" Good decision making relies on student performance data and teacher instructional practice data. One method that utilizes instructional practice data is Japanese Lesson Study, which has three core components: teacher observations by colleagues, critical analysis, and constructive feedback. These instructional practice data inform the teacher of strengths and weaknesses during lessons that would be addressed and corrected in the next lesson.

Teacher study groups also utilize instructional practice data by incorporating a five-phase process: Debrief, Discuss the Focus Research Concept, Compare Research with Practice, Plan Collaboratively, and Make an Assignment. During each session, participants begin by debriefing the lesson they collaboratively planned in the previous session. Teachers describe the lesson they taught, report on any adjustments they made while teaching the lesson, and discuss how students responded. Next, teachers read and discuss a current focus research concept. Afterwards, they compare how the research aligns with the instructional design of their current reading program. Last, they incorporate the focus research concept into the lesson they collaboratively plan and then teach the lesson.

Coaching cycles present another method for collaborative use of instructional practice data. Literacy and math coaches follow a deliberate cycle to scaffold teachers' ability to implement new ideas effectively. The cycle involves holding a pre-observation conference to discuss the goals of the lesson; observing a lesson that focuses on the aspects that have been jointly agreed upon; and debriefing to analyze the instructional data. The cycle continues with a discussion about changes the teachers will make to future lessons. During this process, coaches encourage teachers to use reflective practices. The more they learn about teaching and learning, the more accurately they can reflect on what they are doing well and what needs improvement (Darling, Hammond, & Bransford, 2005).

The most traditional and widely used method of collecting instructional data to alter strategies is the teacher evaluation. Although classroom observations and feedback are the most common practices, examining lesson plans, self-assessments, portfolio assessments, and review of student work samples can also be used.

Action Principles

For District

1. Develop a district-wide plan for collecting, analyzing, and interpreting instructional practice data. Organize district leadership teams responsible for developing protocols or other instruments that can be used as data gathering tools.
2. Provide ongoing professional development and support to administrators, coaches, and instructional leaders so they will be able to effectively implement systems that utilize instructional practice data. Situate learning within a triadic model of assisted performance where administrators provide assistance to coaches; coaches to teachers; and teachers to students (Tharp & Gallimore, 1988).
3. Allocate resources to support the method (e.g., materials, released time, and stipends).
4. Redesign traditional teacher evaluation systems to use instructional practice data including self-assessments, portfolios, and teacher reflection.

For School

1. Determine which method for using instructional practice data will be used and provide ongoing professional development (Hall & Hord, 2001; Gersten, Dimino, Jayanthi, Kim, & Santoro, 2009; Watanabe, 2002; Hasbrouck & Denton, 2005).

2. Identify the group or individual teachers who will participate. This is often based on identifying classrooms where student need is the greatest.
3. Allocate time to implement the method.
4. Provide consistent administrative support (Hall & Hord, 2001). Make adjustments that create blocks of time for teachers to collaborate; find appropriate ways to acknowledge teachers who try to improve their practices, ranging from informal appreciation (such as a "thank you") to more concrete rewards such as stipends or graduate credit.

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Determining Teacher Effectiveness

National Comprehensive Center on Teacher Quality

Teachers are central to any effort to improve instruction. Yet not all teachers are effective. According to a recent survey, nearly 60% of teachers say they work with a few teachers who are simply going through the motions, failing to do a good job. More than 1 in 5 teachers would describe "more than a few" or "quite a large number" of their colleagues in this way (Coggshall, Ott, Behrstock, & Lasagna, 2009). Regular and consistent assessment of teacher skill and knowledge at various points along the educator's career continuum will result in sound hiring and performance management decisions, needs-based professional development, and data to support opportunities for career growth. But determining teacher effectiveness is no easy task. It first requires a thorough understanding of what an effective teacher does and the competencies needed to carry out these tasks. The process should also take into account the specialized roles and context of teachers. For example, does an effective teacher look different at the elementary and high school level? Do teachers serving in a consultant capacity, such as those who teach special education or English language learners, require a different or additional set of skills to be considered effective?

Defining effectiveness also requires using valid and reliable tools for assessing whether an individual teacher possesses these competencies. Students' standardized test scores, particularly value-added test scores, represent one approach to measuring teacher effectiveness. Although test scores are currently under-utilized as a measure of teacher effectiveness, the research is clear that test scores should not be the sole means of determining teacher effectiveness. Policies that require and establish multiple, reliable measures (i.e. performance observations, evaluation of classroom artifacts, and/or portfolio and student/parent evaluations) contribute to a solid, comprehensive approach to determining whether a teacher is highly effective.

Finally, determining teacher effectiveness requires deciding what to do with the information gathered in order to improve the quality of instruction for students. Districts should contemplate whether this information can or should be used to make personnel and compensation decisions, to inform professional development, and/or to identify teacher leaders.

Action Principles

For District

1. Determine what skills and knowledge an effective teacher must possess.
2. Determine what outcomes an effective teacher must produce.
3. Determine if the context and role in which teachers work require that additional competencies be identified.
4. Develop a comprehensive system, including multiple valid and reliable tools, and regular assessments for determining whether a teacher possesses the necessary skills, knowledge, and competencies.
5. Establish clear outcomes for identified levels of effectiveness, from remediation, to professional development, to positive incentives.
6. Involve teachers in the process of defining teacher effectiveness.

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Using Response to Intervention

Center on Instruction

RTI is a multi-level framework designed to support students who are at-risk for poor learning and behavior outcomes. It includes: appropriate, research-based instruction in reading and mathematics for all students; universal screening (e.g., easily administered screening measures to identify students with mathematics, reading, and behavior problems); increasingly intensive instructional interventions for students who need them (e.g., interventions are provided for identified students for 30 minutes per day for three to five days and then increasingly more intensive interventions are provided if students make inadequate progress); and progress monitoring (USDE, 2009). An RTI framework can provide part of the data used to decide if a student should be evaluated for learning disabilities (LD).

Action Principles

For State

1. Provide guidance, professional development, and technical assistance to pre- and in-service teachers and other school and district personnel on how to use RTI in academic content areas such as reading and mathematics and in behavior behavior management with all students in all grades (Bocala, Mello, Reedy, & Lacireno-Paquet, 2009; Harr-Robins, Shambaugh, & Parrish, 2009; Sawyer, Holland, & Detgen, 2008).
2. Facilitate buy-in and collaboration by involving and training a wide variety of stakeholders at the state leadership level and encouraging similar practices at the district and school levels (Goe & Coggshall, 2007; Mohammed, Roberts, Murray, & Vaughn, 2009).

For District

1. Build consensus by communicating state goals to schools and vice versa, involving key stakeholders, providing administrative supports, and fostering collaboration among all educators.
2. Build infrastructure by addressing schools' RTI needs, aligning state and school roll out plans, and supporting implementation and evaluation through professional development and technical assistance (NASDSE, 2008).

For School

1. Focus on the essential elements of RTI: high-quality, research-based instruction for all students and interventions for struggling students, universal screening, progress monitoring, fidelity, and evaluation (Foorman, Francis, & Fletcher, 1998; Harr-Robins, Shambaugh, & Parrish, 2009; Vaughn & Fuchs, 2003; Vellutino, Scanlon, & Lyon, 2000).

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Choosing and Implementing Technology Wisely

National High School Center

The effective integration and implementation of educational technology is critical to ensure that these tools can make a difference in the academic achievement of all students. These ever-changing technologies include computers, mobile/handheld devices, interactive white boards, social media and multimedia tools, simulations, and games. Research indicates that technology must be used in ways that align with curricular and teacher goals, and offer students opportunities to use these tools in their learning. The findings from a National Research Council report underscored this point, "In general, technology-based tools can enhance student performance when they are integrated into the curriculum and used in accordance with knowledge about learning. But the mere existence of these tools in the classroom provides no guarantee that student learning will improve; they have to be part of a coherent education approach" (Bransford, Brown, & Cocking, 2000). As technology tools continue to evolve, their role in teaching and learning can follow various paths, including computer-based assignments and plans; online/distance learning courses; assessment; research-based educational programs (software and internet-based); and a growing number of online and stand-alone resources and tools.

Growing evidence supports the use of educational and assistive technologies (AT) to enhance teaching and learning for students with disabilities. Over the past ten years, there has been a significant growth in AT tools to provide students with assistance in acquiring reading, writing, and mathematics skills. These AT tools enable students with disabilities to perform tasks that they might not otherwise be able to do on their own. For example, text to speech supports students with print-related disabilities, alternative input devices support computer use for students with physical disabilities, and augmentative communication devices provide support for students with communication disorders.

Research and needs assessments conducted by the National Center for Technology Innovation (NCTI) and the Center for Implementing Technology in Education (CITEd) have led to the creation of two decision-support tools, *The Consumer Guides* and the *EdTech Locator*. These tools help school administrators make informed decisions relating to educational and assistive technology. The *Guides* suggest questions to ask technology vendors and issues to consider in the following five areas:

- Alignment of standards and curriculum goals;
- Implementation of technologies;
- Scientifically-based research;
- Funding for purchasing educational technology; and
- Federal legislative mandates such as Individuals with Disabilities Education Act (IDEA) and the Elementary and Secondary Education Act (ESEA).

The *EdTech Locator* focuses on the work of a technology implementation team in a district or school, outlining the responsibilities for administrators, technology coordinators, professional development coordinators, and teachers. The action principles below are drawn from both resources.

Action Principles

For District

1. Develop guidance for schools on aligning technology products and classroom curriculum.
2. Create a school or district-wide technology implementation team made up of administrators, technology coordinators, teachers, and professional development coordinators to identify key areas of focus for implementation efforts.
3. Work with district or regional educational technology resource centers to establish a list of technology products that address state standards and meet the needs of all students, both with and without disabilities.

4. Collaborate with educational technology resource centers to develop training programs to help district teachers use AT and integrate them into existing curriculum.
5. Consider participating in technology studies conducted by research organizations and local academic institutions.
6. Collaborate with other districts to reduce unnecessary spending and to identify effective technology interventions.
7. Identify grants from state agencies and foundations to purchase needed technologies.
8. Establish public-private partnerships in communities with businesses to build a sustainable technology infrastructure.

For School

1. Ensure that teachers are comfortable using technology for their own productivity and professional learning.
2. Work with professional development and instructional media leaders to integrate technology into instructional initiatives.
3. Create opportunities for teachers to work together to practice with new technologies before using them instructionally.
4. Consider low- or mid-tech devices that can meet the needs of students with lower purchase and maintenance costs.
5. Take advantage of trial periods or demonstration copies of software to ensure that technologies meet the needs of students.
6. Apply for grants from the local school district, state, business partners, and foundations to purchase technologies.

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An Issue Paper by the National Center for Technology Innovation that outlines five key themes in technology development that define "state-of-the-art" educational and assistive technologies.

Using Performance-Based Student Assessments

Assessment and Accountability Comprehensive Center

Performance-based student assessments play a powerful role in validating and monitoring the growth of all students and the success of curriculum and instructional programs. This importance increases in the context of persistently low-achieving schools, in which student growth can be fostered by learning experiences and performance opportunities that invite students to show what they can do with what they are learning. This strategy is not only sound pedagogically, but highly motivating and empowering for students. Such assignments, accompanied by appropriate instructional support, challenge each student to do or create something of value to themselves and others and to take the next step forward in their academic growth.

Performance-based assessments provide key opportunities for students to engage in tasks like those they will be asked to do in higher education and careers. Such tasks often take extended time and concentrated effort, and may call on students to plan, work cooperatively, and communicate results in a variety of formats. Performance tasks and assessments can be designed to call on students to display higher-order thinking skills and to integrate knowledge, skills, and conceptual understanding to successfully complete the assignment. The "doing" implicit in such tasks allows the assessment of a student's developing cognitive and behavioral capacities for successful achievement.

High quality performance-based student assignments and assessments have the power to

- integrate students' knowledge, skills, conceptual understanding, and performance capacities;
- allow students to monitor their own growth and apply clear performance standards to their work; and
- motivate students to set challenging learning goals meaningful to themselves, to strive for excellence, and to celebrate growth and achievement along the way.

Performance-based assignments and assessments can, in the context of project-based learning, become the ongoing central activities and assignments of the instructional program. Such rich and powerful assignments can provide an integrating context for knowledge and skills acquisition, accelerating learning in these specific areas as well.

Performance-based student assessments take more time to administer, often are tied directly to specific curriculum and instructional programs or particular assignments, and take more time for scoring, reporting back the results, and putting the results to effective use with students than do standardized tests.

The assessment challenge, at both the district and school levels, is to develop the capacity of classroom teachers to evaluate student work in shared and common ways, often using established rubrics or scoring criteria to evaluate student products and performances. The results are often complex and nuanced; the student work on such tasks is typically neither right nor wrong, but rather, combines a variety of strengths and areas needing improvement. Such evaluations can inform summative judgments, but, most fruitfully, they provide formative instructional guidance, challenging teachers to use the results to help students take the next steps towards excellence.

Action Principles

The fundamental action principle for states, districts, and schools is to integrate performance-based assessments and their results into their local and classroom assignments and assessments as a core part of instructional systems.

For State

1. Encourage the use of multiple measures, including performance-based assessments, in district and classroom assessment and accountability systems.
2. Provide professional development on the use of performance-based assessments locally to improve the alignment of student activities and assignments to the statewide standards and to monitor student growth.

3. Provide professional development to assist districts and schools to develop professional learning communities that address performance-based assignments and assessments.
4. Selectively employ powerful performance-based assessments in statewide assessments in language arts, science, mathematics, and social science.

For District

1. Ensure that all students have access to rigorous, standards-based instructional programs that address higher-order thinking skills and integrated performance.
2. Ensure that student assignments and assessments employ performance-based assessments among the multiple measures used to monitor student growth.
3. Provide professional development that teachers need to develop, evaluate, and learn from performance-based assessments.
4. Monitor the implementation of instructional programs incorporating standards-aligned, performance-based assignments and assessments.
5. Monitor individual student growth with common local assessments employing multiple measures (including performance-based assessments used formatively).

For School

1. Engage in professional collaboration about identifying and/or developing performance-based assessments, scoring them consistently, and using the results to improve instruction and monitor student growth.
2. Identify and commit to the school-wide use of performance-based assignments and assessments throughout the curriculum and throughout the school year.
3. Identify the methods and criteria for monitoring the success of this strategy.
4. Clearly and visibly communicate within the school community the achievement of students on performance-based assignments and assessments.

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Accelerating Acquisition of Basic Reading Skills: Elementary and Middle School

Center on Instruction

Research and expert opinion suggest that it is important to build basic or foundational reading skills in students who need them, while also providing them with access to grade-level concepts and content. The Response to Intervention (RTI) framework provides one method for accelerating student achievement in various content areas, including foundational skills in reading. In an RTI framework, students receive daily help learning not only so-called "basic skills" (e.g., decoding common words) but also higher order skills, such as comprehension, and grasping critical content in the disciplines. For more information about essential reading components, see the National Reading Panel Report (NICHD, 2000).

Attempts to develop foundational skills require school-wide commitment. Classroom teachers can provide differentiated instruction, create learning situations where heterogeneous pairs of students work together to build foundational skills, and provide sensible accommodations to ensure that all students, including English language learners and those with disabilities, receive meaningful access to the core grade level curricula content. A wide array of school personnel needs to ensure that the school conducts universal screening in reading, monitors progress of students identified as at-risk on a regular basis, and ensures that teachers are prepared to teach higher order skills by providing professional development when needed.

Action Principles

For District

1. Provide ongoing support and mentoring for schools as they expand RTI programs in reading (Gersten, Compton, Connor, Dimino, Santoro, Linan-Thompson, & Tilly, 2008).
2. Create a syllabus or curriculum guide and accompanying professional development for teaching literacy skills to adolescents (Kamil, Borman, Dole, Kral, Salinger, & Torgesen, 2008; Boardman, Roberts, Vaughn, Wexler, Murray, & Kosanovich, 2008).
3. Analyze district-wide data to identify schools that appear to be consistently building foundational skills in reading in low-performing students. Examine their programs and use principles learned and personnel from those schools to provide mentoring to others (Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009).

For School

1. Implement and expand Response to Intervention models in reading across all grade levels when feasible. In many cases, an RTI program will be established in K-3 reading, but often it should be expanded into higher grade levels as well (Gersten, Compton, Connor, Dimino, Santoro, Linan-Thompson, & Tilly, 2008; Glover & Vaughn, 2010).
2. Establish courses in adolescent literacy in middle school. Ensure that courses include not only work on decoding for those students who need it, but also contain a strong emphasis on vocabulary and comprehension (listening as well as reading) (Kamil, Borman, Dole, Kral, Salinger, & Torgesen, 2008; Boardman, Roberts, Vaughn, Wexler, Murray, & Kosanovich, 2008).
3. Use peer-assisted learning or class-wide peer tutoring in day-to-day classroom instruction in reading. Schedule these activities two or three times a week. They should never supplant instruction, but rather support time normally devoted to individual seatwork (Fuchs, Fuchs, Mathes, & Simmons, 1997).
4. Use differentiated instruction for part of reading lessons. Use formative assessment data to determine which students require help in foundational reading skills (Connor, Morrison, Fishman, Schatschneider, & Underwood, 2007; Tomlinson & McTighe, 2006).

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Accelerating Acquisition of Basic Mathematics Skills: Elementary and Middle School

Center on Instruction

An emerging consensus of research and expert opinion is that it is important to build the basic or foundational skills in mathematics of all students who need them, while also providing them with access to grade level concepts and content. Response to Intervention (RTI) models provide an excellent venue for accelerating achievement in foundational skills and proficiencies. In an RTI model, students receive daily help learning not only so-called "basic skills" (e.g., mathematics facts and computation) but also higher order skills, such as problem solving, and the critical content in the discipline. For information about what experts suggest as the critical content in mathematics, see the National Council of Teachers of Mathematics (NCTM) Curriculum Focal Points (National Council of Teachers of Mathematics, 2006) and the report of the National Mathematics Advisory Panel (2008).

Developing foundational skills in students who lack them requires school-wide commitment. It requires that classroom teachers provide differentiated instruction, create learning situations where heterogeneous pairs of students work together to build foundational skills, and provide sensible accommodations to ensure that all students, including those with disabilities and English language learners, receive meaningful access to the core grade-level curricula content. A leadership team consisting of at least two people (including school psychologists, special educators, teachers, and possibly the principal) needs to ensure that the school conducts universal screening in mathematics, monitors the progress of identified students on a regular basis, and prepares teachers to teach higher order mathematics skills through high-quality professional development.

Action Principles

For District

1. Provide ongoing support and mentoring for schools as they expand RTI programs in mathematics (Gersten, Beckmann, Clarke, Foegen, Marsh, Star, & Witzel, 2009; Gersten, Compton, Connor, Dimino, Santoro, Linan-Thompson, & Tilly, 2008).
2. Create a syllabus or curriculum guide that can be used district-wide for double dose mathematics courses (Kamil, Borman, Dole, Kral, Salinger, & Torgesen, 2008; Boardman, Roberts, Vaughn, S., Wexler, Murray, & Kosanovich, 2008; Nomi & Allensworth, 2009).
3. Analyze district-wide data to identify schools that appear to be consistently building foundational skills in mathematics in low-performing students. Examine their programs and use principles learned and personnel from those schools to provide mentoring to others (Hamilton, Halverson, Jackson, Mandinach, Supovitz, & Wayman, 2009).

For School

1. Implement Response to Intervention models in mathematics, when feasible. In mathematics, beginning at only one grade range (e.g., grades 6-8 for algebra readiness or K-3 for early preventative work) is recommended (Gersten, Beckmann, Clarke, Foegen, Marsh, Star, & Witzel, 2009; Gersten, Compton, Connor, Dimino, Santoro, Linan-Thompson, & Tilly, 2008; Glover & Vaughn, 2010).
2. Establish double dose courses in middle school for students who are taking pre-algebra or other challenging, grade-level mathematics courses but lack foundational skills. Create coordination between these courses and the regular grade-level courses. For example, if the grade-level course is focusing on proportional reasoning, a key component in the double dose or foundational course should be fractions (concepts and operations), so students can succeed in grade-level mathematics courses while building foundational skills (Nomi & Allensworth, 2009).

3. Use peer-assisted learning or class-wide peer tutoring in day-to-day classroom instruction in mathematics. Schedule these activities two or three times a week. These should never supplant instruction, but rather support time normally devoted to individual seatwork (Fuchs, Fuchs, Mathes, & Simmons, l997).
4. Use differentiated instruction for part of mathematics lessons. Use formative assessment data to determine which students require help in foundational mathematics competencies (Connor, Morrison, Fishman, Schatschneider, & Underwood, 2007; Tomlinson & McTighe, 2006).

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Accelerating Instruction in Reading: Grades 9-12

National High School Center

Many high school students are below grade level in reading. While the extent of the problem depends on the standard that is used, there is agreement that a substantial segment of high school students are behind (Balfanz, McPartland, & Shaw, 2002). Students needing reading remediation are not evenly dispersed among schools and population subgroups. High poverty schools have a higher rate of students who cannot read at the high school level. In addition, specific groups of students have a higher occurrence of reading deficiencies. For example, students with learning disabilities may enter high school reading on an elementary level (Bremer, Clapper, & Deshler, 2002). The increased enrollment of English language learners has also contributed to a wider gap in reading achievement (Comprehensive School Reform Quality Center, 2005).

All students can benefit from comprehensive interventions embedding literacy strategies into content area classes. High school students struggling with reading need targeted supplemental interventions in order to help accelerate their basic reading levels (for examples, see What Works Clearinghouse, n.d.). Often, students who have difficulty reading in high school face struggles in content-area courses that assume grade-level reading (Bremer, Clapper, & Deshler, 2002). The texts with which students interact in high school become longer and more complex, and the specific disciplinary skills required to interact with those texts become more demanding in high school. At the same time, students' reading challenges also can accumulate as they progress, making the task of identifying the specific nature of students' difficulties and appropriate interventions more challenging.

A number of recent reports point to the challenges of advancing adolescent literacy (Biancarosa & Snow, 2004; Carnegie Corporation, 2010; Graham & Perin, 2007). The following section highlights specific action principles at the state, district, and school levels and provides selected resources that include strategies which might be useful for supporting literacy instruction in high schools.

Action Principles

For State

1. Create a task force or statewide initiative focused on adolescent literacy that would include representatives from various divisions of the state education agency (curriculum, teacher certification, assessment, high school office staff, etc.), institutes of higher education that have teacher pre-service training programs, district staff, and teachers (including high school content area teachers).
2. Design policy structures and supports to drive local implementation of district- and school-wide literacy plans.
3. Consider embedding content area literacy strategies into the certification and recertification process for high school teachers.
4. Create a certification process for high school literacy coaches.

For District and School

1. Develop and support expertise in content area literacy strategies.
2. Screen all high school students for reading achievement levels and provide appropriate interventions to help those several grade levels behind.
3. Provide ongoing, job-embedded professional development on content area literacy strategies for all content area staff.
4. Make instructional and structural changes in the high school that support interventions for struggling readers and literacy strategies (e.g. tiered interventions, extended learning time).
5. Implement, with fidelity, reading intervention programs for students who need additional support with reading.

Annotated State High School Reading Resources

- Bacevich, A. & Salinger, T. (2006): This report provides five recommendations for states and districts based on a study of the Alabama Reading Initiative: begin with a flexible model that reflects a broad research base that can be responsive to the needs of students, content areas, and local conditions; use explicit strategies to increase comprehension across content areas; identify and intervene as early as possible with students who are most at risk; ensure leadership development; and be creative and vigilant with local and external funding.
- Carnegie Council on Advancing Adolescent Literacy. (2010): The Carnegie Council on Advancing Adolescent Literacy has recently released a series of reports that provide research and specific recommendations designed to tackle adolescent literacy. The first of those, *A Time to Act: An Agenda for Advancing Adolescent Literacy for College and Career Success*, contains a chapter with priority action steps for school leaders, district leaders, state leaders, and federal policymakers.
- Haynes, M., & Levin, J. (2009): This report outlines the actions in five states where leaders have made significant gains in adolescent literacy. Those actions include: adopting comprehensive literacy plans that connect reading, writing, speaking, listening, and thinking and integrate literacy instruction within subject areas; strengthening teacher licensure and preparation of teachers to provide research-based reading and writing throughout the curriculum; developing a continuum of supports and interventions for struggling readers and designing policy structures and supports to drive local implementation of district- and school-wide literacy plans.
- National Association of State Boards of Education. (2006): This report recommends that every state "develop and vigorously implement a statewide literacy plan to ensure that all students can read proficiently." It provides a checklist for states that includes laying the ground work for a focus on adolescent literacy, establishing a state framework, and ensuring that teachers have the knowledge and support to provide literacy instruction.
- Southern Regional Education Board. (2009): Leaders from the Southern Regional Education Board states consulted with experts and examined state practices to generate a list of recommended state actions: define specific reading skills students need to master key subjects; identify the best teaching strategies to help students develop comprehension skills in each subject; ensure these strategies are applied statewide by including them in professional development for current teachers and in preparation programs for new teachers; and provide support that struggling readers need.

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- Scammacca, N., et al. (2007): This report, commissioned by the Center on Instruction, offers decision-makers research-based information about interventions that can help older students who continue to struggle with reading. This report provides research-based implications for practice.
- Biancarosa, G. & Snow, C. (2004): This document, which was supported by Carnegie Corporation of New York, outlines 15 key components of comprehensive literacy programs, essentially providing a checklist for schools and districts that wanted to improve their services for adolescent struggling readers. The fifteen components are: direct, explicit instruction; effective instructional principles embedded in the content; motivation and self-directed learning; text-based collaborative learning; strategic tutoring; diverse texts; intensive writing; technology components; ongoing formative assessments; extended time for literacy; professional development; ongoing summative assessments of students and programs; teacher teams; leadership; and comprehensive and coordinated literacy program.

- Kamil, M., et al. (2008): The Institute of Education Sciences (IES) commissioned a practice guide designed to bring the best possible evidence to the challenge of improving adolescent literacy. This report describes five recommendations for instruction as well as the strength of evidence to support each: provide explicit vocabulary instruction; provide direct and explicit comprehension strategy instruction; provide opportunities for extended discussion of text meaning and interpretation; increase student motivation and engagement in literacy learning; and make available intensive and individualized interventions for struggling readers that can be provided by trained specialists.

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Accelerating Instruction in Mathematics: Grades 9-12

National High School Center

Taking advanced mathematics in high school has been found to be strongly associated with postsecondary success (Adelman, 1999). Algebra I is viewed as the "gatekeeper course," and successful completion paves the way for students to advance to higher level mathematics coursework that will help to prepare them for post-secondary career and college opportunities (Bangser, 2008). Unfortunately, a large number of students enter high school with poor math skills (Strickland & Walters, 2009) and are not prepared to successfully complete an algebra course. Without the proper assistance, the likelihood of these students participating in a rigorous math course sequence is greatly reduced.

Accelerating instruction in math helps to address the issue by moving away from the more traditional model of remediation that, in most cases, keeps students on low academic tracks that some believe contribute to their persistent low achievement. The underlying premise of accelerated instruction is that all students should have the opportunity to enroll in rigorous mathematics coursework. Therefore, instead of slowing down the instructional pace for low-achieving students, instruction is accelerated to help these students overcome prior poor educational preparation and "catch up." With accelerated instruction, students learn foundational math skills as well as higher level mathematics content. As a result, they remain on-track to take more advanced mathematics courses.

Accelerating mathematics instruction is especially important to provide foundational skills necessary for mastery of other content areas. Within the context of accelerating instruction, educators must consider the quality and nature of instruction provided. Accelerated instruction must be based on a well-designed curriculum taught by qualified instructors. Implementing this strategy also calls for smaller classes, differentiation of instruction, and the use of multiple instructional modalities such as computer-based programs, hands-on activities, group and independent activities to better address diverse student needs (Portz & Gaudet, 2001).

Although the research evidence on the needs of students who enter high school with inadequate mathematics skills is minimal, schools can employ several promising strategies to accelerate instruction. These include the following:

Double-blocked class schedules: With a double-blocked class schedule, classes meet daily for extended periods and can cover a year's worth of material in one semester. This gives students the opportunity to attempt and earn more credits per year than more traditional schedules such as daily 50-minute classes or a single-blocked schedule with 80- or 90-minute classes meeting every other day (Herlihy & Quint, 2006).

Catch-up courses: Semester-long intensive "catch-up" courses that strengthen ninth-grade students' skills in reading and mathematics appear to help students succeed in the regular curriculum, with gains in credits earned being sustained over time. These courses are designed to prepare students for more rigorous college preparatory classes such as English I and Algebra I(Herlihy & Quint, 2006).

Mathematics support pull-out programs: This involves pulling students out of their regular classes for participation in more specialized instruction tailored to their academic needs (Portz & Gaudet, 2001).

For more information on these strategies, please reference the section on "Credit Recovery Programs" in Chapter 5 of this *Handbook*.

Action Principles

For District

1. Provide guidelines on how to offer accelerated mathematics programs.
2. Provide oversight and support for instructional initiatives aimed at accelerating instruction to help ensure adherence to guidelines and effective implementation.

3. Provide criteria for assessing student skill deficits and identifying which students need accelerated instruction.
4. Provide standards and assessments for monitoring instruction and student learning.
5. Provide teachers with ongoing support for and professional development on implementing accelerated instruction.
6. Track the progress of school efforts and student achievement to help identify effective practices and establish a system of accountability.

For School

1. Use standards and assessment data to help plan and/or improve the math curriculum and ensure that it is tailored to students' needs.
2. Develop early warning systems to identify students in need of extra math instruction when they enter high school.
3. Administer a diagnostic assessment at the beginning of the school year to identify specific math skill and content weaknesses and use this information as the foundation for students' curricular and instructional planning.
4. Make teacher assignments based on the needs of students; an assessment of teacher strengths and weaknesses should guide these decisions. Teachers should have adequate mathematics content knowledge as well as the skills to work with struggling students. Provide teachers with professional development and support in issues related to curriculum and instruction (including model lesson plans and opportunities to engage with master teachers).
5. Develop guidelines to monitor and ensure the efficient use of class time, student engagement, and the use of a range of instructional strategies.

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Providing Advanced Coursework in High Schools

National High School Center

The availability of and participation in Advanced Placement and International Baccalaureate programs and advanced courses in science, technology, engineering, and mathematics (STEM) disciplines are integral to preparing high school students for college and the workforce. Students are more likely to stay in school (Archambault, Janosz, Morizot, & Pagani, 2009) and perform at high levels (Cole, Kennedy, & Ben-Avie, 2009) if they are engaged with a challenging curriculum that helps them develop the college- and career-ready skills they need to succeed after high school.

Advanced Placement (AP) programs are designed to provide students with college-level courses and exams. Many colleges throughout the nation reward students who score a 3 or higher on Advanced Placement tests with college credit or access to higher level college courses. Research shows that students who take the AP course and the AP exam earn higher GPAs and more credits in college and are more likely to graduate from college than students who took only the AP course or a non-AP course in the same subject (e.g., Hargrove, Godin, & Dodd, 2008; Dougherty, Mellor, & Jian, 2006).

In recent years the number of students taking Advanced Placement courses has increased (College Board, 2009). The largest gains in Advanced Placement course taking are among groups of students previously underrepresented in these courses, with minority participation having increased by 106% between 2007 and 2008 (Wakelyn, 2009). However, despite these gains, African American, Hispanic, and American Indian students are still underrepresented in Advanced Placement courses.

The *International Baccalaureate (IB)* program is designed as an academically challenging two-year program for highly motivated juniors and seniors that prepares them for success in college and beyond. Recognized across the world as a demanding high school curriculum, the IB program includes a set of rigorous written and oral examinations that culminates in an IB diploma. Over the past decade, the number of IB programs in North America grew from 227 to 624, increasing by about 10% annually, and the program continues to expand into urban high schools throughout the nation (Byrd et. al., 2007).

Like AP students, those who participate in an IB program enjoy significant advantages for college admittance and have greater success in postsecondary settings than their non-IB peers (International Baccalaureate Organization, 2007). Furthermore, research suggests that an IB program can help urban schools attract and retain African American, Hispanic, and American Indian students, as well as students from disadvantaged backgrounds (Mayer, 2008).

Science, Technology, Engineering, and Mathematics (STEM). Both AP and IB, along with other programs, provide students with rigorous, challenging courses in core subjects, including advanced science and mathematics. As changes in the global economy call for a diverse cadre of innovators in STEM fields, a dwindling number of students in the United States are entering these fields. Moreover, American high schools are failing to equip their graduates with the knowledge and skills they need to excel in STEM fields in college and in the workforce (Seymour & Hewitt 1997; Taningco, Mathew, & Pachon, 2008).

Many states, districts, and schools are implementing programs designed to expose all students to a rigorous STEM curriculum and keep students—particularly underrepresented minority and female students—in the STEM "pipeline" through and beyond college. High quality curriculum and instruction, supported with ongoing professional development for STEM teachers, are keys to ensuring that students graduate with the skills they need to excel in the high-demand STEM fields (Leinwand, 2008). Furthermore, schools and districts that partner with the local scientific and business communities, as well as with institutions of higher education, can focus their resources to enhance STEM learning opportunities (Coppola & Malyn-Smith, 2006) and provide hands-on work-based opportunities for students to explore STEM in the real world.

Action Principles

For State

1. Develop a STEM task force and a statewide strategic action plan for accelerating education in STEM disciplines.
2. Seek federal and private grant funding to enhance STEM education.
3. Provide incentives for districts to partner with local institutions of higher education and the business and scientific communities to enhance STEM education.
4. Dounay (2006) offers additional action principles for states.

For District

1. Ensure that all students have access to advanced coursework. For example, provide online programs for students who attend rural schools that have limited ability to offer advanced courses.
2. Develop strategies to increase enrollment of students who are underrepresented in advanced courses. Maintain records on enrollment in advanced coursework, disaggregated by school and subgroup. Use these data to track underrepresented students' enrollment patterns in advanced courses.
3. Provide teachers with the appropriate training and professional development to deliver advanced instruction.
4. Engage local institutions of higher education, STEM industry members, and other agencies in enhancing STEM education programs.
5. Apply for a grant from the National Science Foundation (NSF) to enhance STEM education. Partner with local institutions of higher education to develop and implement comprehensive K-20 STEM programs that specifically target minority and female students.

For School

1. Develop strategies and provide appropriate supports to increase access to, enrollment in, and completion of advanced courses for groups of students who historically have not been given the opportunity to participate.
2. Design needed support systems.
3. Support teachers of AP, IB, and other advanced courses who pursue professional development.
4. Foster student engagement in STEM learning through hands-on and inquiry-based opportunities.
5. Provide financial assistance for test fees to low-income students.
6. Provide opportunities for interdisciplinary teaming among teachers, so that, for example, science and reading teachers can collaborate to design course modules for students.
7. Implement innovative school structures to encourage STEM enrollment, including ninth grade academies, catch-up courses, and extended learning time.

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Implementing Competency-Based Instruction in High Schools

National High School Center

Since 1908, Carnegie Units have been the primary means of determining course completion credit and graduation eligibility in the nation's high schools. In brief, a Carnegie Unit represents how many "contact hours" or how much "seat time" a student has devoted to the study of a particular school subject (usually 120 hours per credit). Competency-based instruction provides an alternative to the Carnegie Unit system by focusing on the mastery of a set of specific competencies or skills that encompass the course content. Students in competency-based courses must demonstrate and apply what they have learned by performing real-world tasks (Wiggins, 1990). Through an outcome-focused approach, competency-based instruction in high school enables and supports the following:

- *Flexibility*: Students can shorten the time needed to meet graduation requirements (e.g., by placing out of a course or mastering the required skills in a reduced timeframe) and take advantage of extra-curricular learning opportunities such as interdisciplinary and independent studies, dual enrollment programs, and internships;
- *Multiple assessments*: Educators can look to multiple measures of what students actually know and can do rather than rely solely on large-scale, standardized, norm-referenced achievement tests that are predominantly multiple-choice (Schmoker, 2008; 2009); and
- *Responsiveness to individual student needs*: Competency-based instruction allows English language learners (Gomez, 1998) and special education students (Venn, 2000) alternative mechanisms to demonstrate their proficiency in a content area.

Most state policies permit students to earn proficiency or competency-based credit whether by completing an activity that demonstrates mastery of the required content from a list of approved activities or case-by-case upon approval by a local school board or superintendent. One of the more common mechanisms for demonstrating competency-based mastery is performance assessments (Marzano et al., 1993; Wiggins, 1998), which include projects and portfolios such as those used in Michigan, New York, and Maine. Project-based learning (PBL) is a type of competency based instruction that engages students in meaningful and relevant work and builds on student interests. PBL is characterized by extended student inquiry activities; deep study over a breadth of topics; some degree of self-directed learning; and a presentation of findings, results, or conclusions (Ravitz, 2008).

Portfolios are another strategy used in competency-based instruction to showcase and document student work as exemplars of achievement and/or progress towards achieving learning standards (Gomez, 1998). Additional competency-based instructional approaches currently in use by states include courses offered at occupational centers, postsecondary institutions, and technical training programs; community service, internship and externship activities that are monitored or structured by the school; foreign exchange programs or demonstrated fluency in a foreign language or American Sign Language; private instruction; distance learning opportunities; and artistic performances and visual art demonstrations and exhibitions (Education Commission of the States, 2006; Lloyd, 2007).

Action Principles

For State

1. Provide assessments for all core courses in line with state standards that students can take to earn credit. These exams should emphasize authentic and challenging content and skills, be validated as accurate predictors of postsecondary performance, and should be aligned with postsecondary school systems (e.g., California, Washington, New York), as well as 21st century knowledge and skills (Achieve, 2004a; 2004b).
2. Provide resources and expertise to districts to support professional development on effective performance assessment.

For District

1. Develop resources (e.g., rubrics, content- and grade-specific models and exemplars) to support implementation of performance assessment at the school level.
2. Provide professional development in effective performance assessment in the subject areas.

For School

1. Develop and implement mechanisms (e.g., policies, procedures, guidelines, checklists, portfolio rubrics, block scheduling, student advisories, career academies) for structuring, monitoring, documenting, and evaluating students' out-of-school and extra-curricular learning experiences.

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8

Scheduling and Learning Time: Introduction

Center on Instruction

A recent report from the National Center on Time and Learning (NCTL) demonstrates a correlation between increased learning time and boosts in middle school and high school achievement. While the report shows positive trends, researchers acknowledge the exploratory nature of the data and emphasize the need for more definitive research in this area (Gewertz, 2009). Other research supports the effectiveness of well-designed programs that expand learning time by a minimum of 300 hours per school year (see Frazier & Morrison, 1998). However, extending learning time into before- and after-school hours can be difficult to implement effectively due to the complexity of integrating "extra" instruction with existing academic instruction during the school day (see James-Burdumy, Dynarski, & Deke, 2007).

Increased learning time, defined as increasing the length of the school day, week, or year schedule to significantly increase the total number of school hours devoted to academic and enrichment activities, is an area of high interest as states, districts, and schools strive to raise students' achievement. Many states and districts have considered various ways to increase the amount of time available to students for learning activities, including restructuring and extending the school day (and altering the school year structure), and providing full-day kindergarten and preschool programs. Schools and teachers have, for example, implemented block scheduling, reduced time spent in elective classes to create guided study halls that give students additional support, increased time spent in core academic classes, and reduced transition times both between and within classes.

Unfortunately, just increasing the amount of instructional time is not enough to achieve sufficient learning gains. Instruction provided during allocated time must be at an appropriate level and delivered in a way that is effective, efficient, meaningful, and motivating. Ultimately, the success of altering the school day to increase learning time will depend on how well teachers are trained to use the extra time.

The quality of instruction (including instructional time provided before and after school) can be enhanced by strategies that increase student time-on-task and engagement and by mastery learning techniques. Both of these strategy sets are similar in intent, and both provide students with instruction at appropriate levels, use assessment data to inform instruction, and differentiate instruction to increase student achievement. Coupling increased instructional time with quality instruction will help students become more active and motivated, with the potential to achieve greater learning gains.

Finally, adequate and structured instructional planning time is another component of developing and delivering quality instruction. Shared planning time for teams of teachers is useful for collaboratively analyzing student data, planning instruction, coordinating lesson plans, and working through common curricular "problem spots." This time can also be used to provide grade level, subject, or interdisciplinary team professional development.

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Restructuring and Extending the School Day

National High School Center

Schools, districts, and states are struggling to improve education and increase student learning and achievement. Some reform ideas have focused on increasing the time students spend in school and reorganizing school schedules. Currently, the 180 six-hour-day schedule used in most schools is not based on the needs and learning styles of students, but rather on a 19th-century agrarian system (Farbman & Kaplan, 2005). Many states and districts have considered ways to change the outdated way that time is spent in school by (1) transforming school day schedules; (2) extending the school day; and (3) altering the school year structure. Ultimately, though, these reforms must not focus on simply extending the time students are in school, but on increasing the time students engage in productive, academic learning (Silva, 2005).

Transforming Time Structure During the School Day

One strategy that schools are using to increase instructional time spent on core subjects such as reading and mathematics is block scheduling. Typically, block scheduling divides the school day into four periods of 80-100 minutes, and alternates subject matter by day or semester. As a result, students are engaged in learning for longer periods of time. Block scheduling has been effective in San Diego's Blueprint for Student Success program, where double and triple length reading classes boosted student achievement enough to narrow school achievement gaps by about 15% over two years (Public Policy Institute of California, 2005). However, the success of block scheduling depends on how well teachers are trained to use the extra time effectively. Some schools also use block scheduling for a "double dosing" of core subjects. Students may attend core classes for longer time periods than their other classes during the day in order to improve achievement (Kennelly & Monrad, 2007).

Other strategies that schools have used to increase academic achievement are to reduce time students spend in elective classes and to create guided study halls where students can receive additional support from instructors. Student advisories, where students meet with teachers to discuss schoolwork or more general concerns, can also replace study halls. The advisory period gives teachers time to develop relationships with students thereby helping to increase student engagement in school which is a vital part of student success (Pennington, 2006).

Extending the School Day

A study of high-performing high schools in Massachusetts found that all the top performing schools had expanded school days (The Rennie Center for Education Research and Policy, 2003). The most important aspect of extending the school day is to ensure that the extra time is spent in academic endeavors which engage students. Some strategies that schools have used are lengthening the time students spend in core academic classes, implementing transition programs or credit recovery classes, creating community partnerships in which students participate in internships or online or web-based classes, and offering after-school or supplemental education services (SES) for students.

For low-income or minority students, Title I SES can be particularly helpful. Poor and minority students are less likely than their more affluent peers to have education resources and learning experiences outside of school (Silva, 2007). SES, when implemented over extended periods of time and frequently monitored and evaluated, can provide opportunities to close the achievement gap between these students and their wealthier peers. SES can focus on building core academic skills, perhaps language acquisition for English language learners or credit recovery classes, areas for which there is not enough allotted time during the school day.

Extending/Altering the School Year

Research suggests that low-income students experience significant learning loss over the summer months, compared with children from higher income families who have access to travel, camps, and other enrichment activities (Pennington, 2006). Year-round schools may help to reduce the negative effects of summer learning loss; however, the structure must increase total school hours and not simply reorganize the traditional school year length over a 12-month period (Silva, 2007). Summer programs help engage students in unique ways, such

as through internships or leadership programs. The Knowledge is Power Program (KIPP) schools have reported increased academic achievement among their predominantly minority and urban students, using a lengthened school year and a mandatory 3-4 week summer school session (Pennington, 2006). Furthermore, many summer programs focus on helping to ease the transition from middle to high school, a critical time for students. Finally, a few high schools have employed "J terms," a January or June term lasting approximately three weeks. The most common areas of focus for J term courses are academic recovery, multi-disciplinary projects, internships, or a combination of academic and multi-disciplinary classes. These activities are beneficial to all students, particularly low income and minority students.

Action Principles

For State

1. Help districts build capacity to address various aspects of extended learning time including: enlisting support from teachers' unions; providing funding for extended learning time initiatives; developing resources for professional development on the effective use of additional or newly structured learning time; and monitoring extended learning time initiatives.

For District

1. Create buy-in for extended school days from parents, teachers, students, and the community.
2. Allocate and increase funds to support extended learning time.
3. Provide professional development to ensure that teachers use extra time effectively.
4. Create local partnerships with businesses, organizations, etc., to support the extended time initiative.
5. Determine how the district will monitor progress of the extended learning time initiative.

For School

1. Implement professional development to aid teachers in using extra school time effectively.
2. Determine how to restructure the school day so that the students who need the most support are given more instructional opportunities.
3. Create a plan for monitoring the progress of the extended learning time initiatives as well as for continuous improvement.

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Providing Full-Day Kindergarten

Center on Instruction

Over the past ten years, consensus has developed on the educational value of full-day kindergarten, especially for young children who are economically disadvantaged or have other at-risk characteristics; for those children, the additional time in kindergarten contributes to early prevention of the achievement gap. Research syntheses that compare half-day to full-day kindergarten show no negative effects for full-day kindergarten and typically support positive effects for academic learning, specifically early reading skills (although it is not clear that those effects are sustained through the primary grades). In the U.S. Department of Education's landmark Early Childhood Longitudinal Study (ECLS), kindergarten children in full-day classes had higher reading and mathematics achievement by the end of the kindergarten year compared with those in half-day classes. Studies have also shown that full-day kindergarten reduces the need for remediation and results in fewer grade retentions. Full-day kindergarten seems to promote social and behavioral adjustment to school. Children with the full-day experience do better with the transition to first grade, demonstrate significant gains in socialization and higher behavioral outcomes, and have better attendance in kindergarten and the primary grades.

Full-day kindergarten offers the opportunity for extended time devoted to academic learning as well as social interaction and development. For example, the ECLS study found that children in full-day classes were much more likely to spend more than an hour per day on literacy (68% of full-day classes vs. 37% of half-day classes) and to spend time every day (and more than half an hour per day) on mathematics (81% of full-day classes vs. 52% of half-day classes). Researchers have found that full-day programs are more likely to include individualized and small-group work as well as more child-initiated activities. Some researchers have theorized that, in offering extended and individualized contact with children, full-day kindergarten teachers are more likely to detect learning and developmental needs earlier and arrange for appropriate interventions.

Action Principles

For State

1. Consider reallocation of existing funds to provide financial support for districts to provide full-day kindergarten (especially for disadvantaged children) to help with the additional staffing and space costs incurred by districts.
2. Consider reallocation of existing funds to provide financial support to help full-day kindergarten programs operate quality programs. For example, the additional time of an extended day may require new curricular materials and staff training to use the time for targeted student skill development.
3. Provide model kindergarten standards and assessments that are appropriate for the full-day kindergarten experience as well as recommended criteria for selecting curriculum.
4. Offer professional development for kindergarten teachers to enable them to make productive use of the longer day with developmentally appropriate, challenging, and engaging activities.
5. Set certification standards for kindergarten teachers that require qualifications consistent with national standards.

For District/School

1. Conduct periodic quality reviews of kindergarten classrooms to ensure that the full day is used appropriately and use the results of those reviews to provide feedback to classroom staff.
2. Provide expert coaching for kindergarten teachers, especially to help teachers move from half-day curriculum to a full-day curriculum.
3. Provide kindergarten staffing models that facilitate individualized and small group opportunities to ensure that the additional full-day kindergarten schedule is providing the type of instructional support that makes a difference in student outcomes.

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Providing Preschool Programs

Center on Instruction

Over the past three decades, evidence about the benefits of quality preschool education has mounted (Barnett, 2008; Snow, Burns, & Griffin, 1998; Schweinhart, 2001) and, increasingly, making preschool universally available has become a goal of state and local governments. Now more than 80% of four-year olds attend some type of preschool with about half of those enrolled in a publicly supported pre-K program; participation by three-year olds is much more limited because, to date, the growth of public programs has focused largely on education for four-year olds (Barnett et al., 2008). The outcomes associated with high-quality preschool experiences include academic and social success in kindergarten, first grade, and beyond; several landmark longitudinal studies even demonstrate the lasting effects of high-quality preschool on disadvantaged children's opportunities for academic achievement, social adjustment, and well-being (Schweinhart et al, 2005; Barnett, 1996; Ramey & Campbell, 1994; Campbell & Ramey, 1994).

Of course, the educational benefits of preschool accrue only when the preschool experiences are of high quality. Unfortunately, past studies have shown that the majority of preschool programs in the United States do not reach the necessary level of quality (Cost, Quality and Outcomes Study Team, 1995), and that is especially true of those programs serving the at-risk child population. Quality characteristics that make a difference include: positive warm relationships between adults and children, regular communication between adults and children, and adults encouraging children to explore, reason, and solve problems. Other characteristics of high-quality programs include a curriculum that teaches skills associated with future academic success, including the opportunity to learn readiness skills; variety in schedule and offerings; small group sizes; credentialed teachers; appropriate adult-child ratios; a well-equipped and spacious environment; and ongoing professional development and supervision (Strickland & Riley-Ayers, 2006). The recent report of the National Early Learning Panel offers educators and policymakers more detailed information about the early skills that are important for later literacy success (National Early Literacy Panel, 2008).

Action Principles

For State

1. Reallocate existing funds to provide financial incentives for districts/schools/community providers to offer preschool education or extend the time of services through longer days or more days per week.
2. Reallocate existing funds to support costs that enable at-risk children to participate in preschool, including reimbursing transportation costs, which are often a barrier.
3. Provide financial incentives for districts/schools/community providers to provide preschool education for children younger than age four.
4. Strengthen preschool standards to include appropriate child-teacher ratios that allow for individualized attention, appropriate screening and assessments, and educational goals.
5. Provide incentives for preschool programs that have demonstrated quality practices.
6. Set certification standards for preschool teachers that require qualifications consistent with national standards.

For District/School

1. Arrange for quality reviews of preschool classrooms to provide feedback for teachers, including expert supervision and coaching for preschool teachers.
2. Include preschool teachers in routine professional development events as well as specialized professional development.
3. Select a research-based curriculum that includes literacy and language skill development.

4. Provide education for parents of at-risk children designed to encourage their children's participation in preschool.

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Providing Adequate and Structured Teacher Instructional Planning Time

Center on Instruction

Common planning time for grade level, subject, or interdisciplinary teams has increasingly been considered a crucial part of school improvement. Research suggests that sufficient, scheduled planning time is essential for these teams to be effective (Flowers, Mertens, & Mullhall, 1999). Collaborative teams, in which teachers share planning time and a common group of students, have been correlated with better school culture, more effective parent communication, higher student achievement, and increased teacher motivation and job satisfaction (Kassissieh & Barton, 2009; Flowers et al., 1999; Little, 1982; Jackson & Davis, 2000; Piccucci, Brownson, Kahlert, & Sobel, 2002). There is good reason to believe that joint planning time is also critical for building the type of professional learning community that schools aspire to achieve.

Generally, common planning time can provide opportunities for teachers to collaboratively discuss and resolve curricular issues, coordinate lesson plans, and locate common "problem spots" (i.e., areas in the grade level curriculum that tend to cause problems). This time can also be used to generate high-quality explanations of terms in mathematics and science that are difficult to explain, to determine key academic language necessary for success in that grade's curricula, and to generate useful examples for lessons in reading comprehension, vocabulary, literary analysis, math problem solving, and others. Some structured planning time for teams can also be used to provide grade-level, subject, or interdisciplinary team professional development.

Action Principles

For District

1. Ensure adequate teacher planning time in district schedules by adding school days, adjusting the length of the school day, modifying the early release/late start schedule, or using a block schedule (Finding Time for Training and Collaboration, 2003).
2. Allocate resources to support planning times for teachers and teams (Miles & Frank, 2008).
3. Provide professional development to support collaboration and teaming. This may entail a format for grade level teams or content-area teams (at the secondary level) to use in group meetings (Herman, Dawson, Dee, Greene, Maynard, Redding, & Darwin, 2008).
4. Develop tools to help teacher teams productively discuss curricula, instruction, and student progress (Oxley, 2007).
5. Set expectations for routine teacher collaboration, analysis, evaluation, and experimentation (Little, 1982).
6. Restructure budgets so that funds are provided for teacher planning time.

For School

1. Establish clear expectations for the work products developed during planning time (Kassissieh & Barton, 2009; Prager, 1992).
2. Prepare agendas for team planning time so that time is used efficiently (Kassissieh & Barton, 2009; Prager, 1992).
3. Organize the instructional schedule to include sustained time for team collaboration (Mclaughlin & Talbert, 1993, Kassissieh & Barton, 2009; Prager, 1992). All teachers at each grade level should have one common planning time a week.
4. Utilize other teachers, the principal, aides, or parent volunteers to free teachers to participate in team meetings (Prager, 1992).
5. Create a weekly schedule for planning time that specifies the purpose for each period, that is, to plan individually, with their grade level colleagues, and in subject or interdisciplinary teams (Prager, 1992).

6. Offer relevant professional development for grade level, subject, or interdisciplinary teams. Consider asking teams to identify areas of need based on results of annual assessment data. Use these areas of weakness to choose professional development that will be relevant to the team (Herman, Dawson, Dee, Greene, Maynard, Redding, & Darwin, 2008; Little, 1982).
7. Include teacher leaders in organizing planning time, expectations, and professional development (Little, 1982).

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Increasing Time-on-Task and Student Engagement

Center on Instruction/National High School Center

Time-on-task refers to the amount of time students spend attending to school-related tasks (Prater, 1992), such as following directions and engaging in learning activities. Time-on-task is also sometimes referred to as "engaged time." Studies indicate that up to 50% of the school day is spent on non-instructional activities in general and special education classrooms (Good, 1983; Thurlow et al., 1983), leaving ample room for improvement in the area of time management. While there is some relationship between time-on-task (or engaged time) and student achievement, simply increasing the amount of time available for instruction is not enough to achieve learning gains. Time allocated for instruction must be appropriate; that is, at the appropriate instructional level for students and delivered in a way that is effective, efficient, meaningful, and motivating to students. It is important to keep in mind that most studies have measured *allocated time* (time students are required to be in class), and only a small number of studies have attempted to measure *engaged time* (time students participate in learning activities) and *academic learning time* (time when true learning occurs) (Aronson, Zimmerman, & Carlos, 1998). However, findings from those studies tend to support a moderate relationship between engaged time and achievement and an even larger relationship between academic learning time and achievement (see Cotton & Wikelund, 1990).

Action Principles

For State

1. Enhance teacher understanding and use of strategies designed to increase student time-on-task by providing high-quality professional development concentrated on features of effective instruction, instructional management, and classroom management. Though research is inconclusive about the most effective ways to increase instructional time within the classroom, most researchers agree that improving teachers' time management techniques is a good starting point (Hossler et al., 1988).
2. Embed specific information on time-on-task, student engagement, and academic learning time within teacher preparation programs at institutions of higher education.

For District

1. Reinforce and extend professional development provided by the SEA. This can be done through instructional coaches who work directly with teachers, model strategies taught during professional development sessions, and offer frequent feedback to teachers.

For School

1. Improve time management, increase the proportion of time spent on academic subjects, and adopt alternative academic calendars to maximize the amount of time available for student learning (Aronson, Zimmerman, & Carlos, 1998).
2. Actively engage students in learning at appropriate levels of difficulty throughout the day (Aronson, Zimmerman, & Carlos, 1998; Fisher, 2009; Prater, 1992). This applies to independent seatwork in particular, which consumes much of the academic time in classrooms, especially at the higher grade levels (Rock & Thread, 2009).
3. Monitor student performance through formative and summative assessment and use student data to inform instructional decision-making and ensure appropriate levels of instruction (Aronson, Zimmerman, & Carlos, 1998).
4. Differentiate instruction by using various grouping formats, modifying assignments, allowing students to respond in multiple ways, and using other effective instructional strategies such as reteaching and providing examples.

5. Utilize classroom and behavior management strategies that reduce transition times between activities and disruptions during instructional time (Prater, 1992).

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Applying Mastery Learning Techniques

Center on Instruction

Mastery learning uses differentiated and individualized instruction, progress monitoring, formative assessment, feedback, corrective procedures, and instructional alignment to minimize achievement gaps (Bloom, 1971; Zimmerman & Dibenedetto, 2008). The strategy is based on Benjamin Bloom's *Learning for Mastery* model, which emphasizes differentiated instructional practices as strategies to increase student achievement. Drawing from the principles of effective tutoring practices and learning strategies, mastery learning uses feedback, corrective procedures, and classroom assessment to inform instruction. Rather than focusing on changing content, this strategy endeavors to improve the process of mastering it.

In a mastery learning classroom, teachers follow a scope and sequence of concepts and skills in instructional units. Following initial instruction, teachers administer a brief formative assessment based on the unit's learning goals. The assessment gives students information, or feedback, which helps identify what they have learned well to that point (diagnostic) and what they need to learn better (prescriptive). Students who have learned the concepts continue their learning experience with enrichment activities, such as special projects or reports, academic games, or problem-solving tasks. Students who need more experience with the concept receive feedback paired with corrective activities, which offer guidance and direction on how to remedy their learning challenge. To be effective, these corrective activities must be qualitatively different from the initial instruction by offering effective instructional approaches and additional time to learn. Furthermore, learning goals or standards must be aligned with instruction (or opportunities to practice), corrective feedback, and evaluation.

Research on mastery learning across grade bands has shown positive cognitive and effective learning outcomes in students in general, including learners considered at risk of academic failure (Guskey & Gates, 1986). Most empirical research on this strategy was conducted over two decades ago; however, its founding principles have guided more recent effective instructional and measurement practices. Most of its components, such as the use of feedback, correction, and differentiated instruction, are well documented key tools in the education of students with special needs and English language learners. Results of observations in mastery learning classrooms have shown increased student achievement, retention of learned material, involvement in learning activities, and positive student affect (attitude and demeanor). In addition, the successful use of mastery learning has positive effects on teachers as well, as their expectations for student achievement improve.

Action Principles

For State

1. Define learning goals or standards that are aligned to instructional units across content areas.
2. Collaborate with institutions of Higher Education to include information about mastery learning strategies in teacher preparation programs.

For District

1. Offer professional development events for teachers and administrators to enhance their capacity on how to implement the mastery learning strategies effectively (Guskey & Pigott, 1988).
2. Identify and provide access to research-based formative assessment tools to guide instruction for students who have learning difficulties.

For School

1. Deliver instruction through large and small group-based instructional techniques combined with progress monitoring and formative assessment. The results of assessment will guide development and delivery of individualized enrichment experiences for those who master the concepts and differentiated corrective learning for those who still need additional experience.

2. Provide opportunities for teams of teachers to plan and prepare procedures and materials to use for feedback, correctives, enrichment, and instructional alignment.
3. Combine teacher expertise and resources to enhance the classroom environment and collaboration (Guskey, 2007).

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9

Student Supports: Introduction

Center on Instruction

Today's students are extraordinarily diverse, representing a wide range of experiences, cultures, strengths, weaknesses, abilities, disabilities, and perspectives. These students all differ in their instructional and support needs, but all are expected to be successful. Districts and schools must organize themselves to ensure that every student has a pathway to success and is supported through a wide variety of programs and instructional approaches. This chapter will focus on supports for struggling and at-risk students, including students with disabilities, English language learners, and students transitioning from middle to high school. Support can come from school-based personnel, community partners and volunteers, parents, and families and should include a wide range of research-based strategies designed with flexibility in mind.

Often the first step in serving diverse students is identifying those in need of support and intervention. Screening for deficits in academics and behavioral functions (for example, self-management and relationship skills) and monitoring progress at regular intervals are effective ways of identifying students needing support or intervention. Districts will often play a critical role in assisting schools with the selection of appropriate measures to accurately assess these needs.

After assessing needs, schools frequently need guidance on instructional methods appropriate for each student. For instance, students with disabilities must receive high-quality, research-based instruction within the least restrictive environment. English language learners require effective instruction to build academic language proficiency and guided instruction to build vocabulary. These students, along with other students identified as at risk, may also require supplemental services provided outside the general classroom.

These could take the form of one-on-one or small-group tutoring in one or more academic skill areas, specific interventions targeting social-emotional needs (such as social and emotional learning), or targeted language interventions.

Students transitioning from middle school to high school often need targeted support. This period in a student's life is sometimes characterized by disengagement and a decline in grades, motivation, and attendance. Furthermore, many students enter ninth grade unprepared to manage the increased academic and social expectations. Research supports the implementation of transition programs and suggests that these interventions are linked to positive student outcomes.

Community partners and students' families can be great resources to schools in need of improvement. Many schools have developed partnerships with various community entities (e.g., businesses, universities, and faith-based and non-profit organizations) and receive support in the form of volunteers for tutoring, donations of school supplies, assistance with after-school programs, and support for educational employment opportunities. Furthermore, engaging parents in their children's academic progress has shown to improve students' learning.

These interventions should occur in a positive school climate where students feel safe, where the academic and behavioral competencies of all students are supported, and where instruction responds to student needs. A positive school climate is associated with good achievement gains and a reduction in behavior problems, achievement gaps, and dropout rates.

Understanding and Addressing Learner Diversity

Assessment and Accountability Comprehensive Center

In successful districts and schools, students reach high levels of academic achievement and are fully prepared for success in a wide variety of postsecondary educational and career options, regardless of their backgrounds and starting points. To reach this common goal for today's extraordinarily diverse students, districts and schools must organize themselves to ensure that a wide variety of programs, curricular and instructional approaches, and pathways to success are made available to all students.

As described in the sections of this chapter that follow, student diversity has many dimensions, including significant individual and group differences in culture, ethnicity, gender, previous educational experiences, optimal modes of learning, and groups of students with unique sorts of challenges, including the socio-economically disadvantaged, English language learners, and students with disabilities.

All students must be taught the rigorous standards-based academic content that will enable them to be proficient. Yet, the reality of learner diversity challenges school districts and schools to provide rigorous programs that meet students where they are academically (which may be substantially below grade level), maximize their growth as learners, and accelerate their learning to close achievement gaps.

It is not surprising that diverse students have differentiated needs. In low-achieving schools with many low-achieving students, an action plan to accelerate the learning of all students will:

1. Ensure that all students have access to rigorous, standards-based instructional programs which meet their individual needs.
2. Identify the needs of individual students.
3. Provide flexibility, and choice wherever possible, in curriculum and instructional programs that meet individual needs.
4. Provide teachers with the professional development they need to address learner diversity.
5. Monitor the implementation of instructional strategies effective with diverse groups of students.
6. Measure student learning during instruction to ensure the effectiveness of instruction with all students and to alter instruction as needed (formative assessment).
7. Address student learning needs in a timely way to ensure continuous, accelerated learning.
8. Monitor individual student growth with common local assessments employing multiple measures (formative assessment).
9. Monitor the achievement of diverse groups of students through data aggregated by group to ensure the success of curriculum and instructional programs with all students.
10. Use data to provide tailored instruction based on each student's level of achievement and ongoing needs.

The central challenge in a district and school action plan addressing learner diversity is to ensure that the programs and learning opportunities offered have sufficient academic rigor to maximize student growth while having sufficient flexibility to meet the diverse needs of all students and to ensure that the differentiated needs of each student are successfully addressed.

Action Principles

For District

1. Recognize the diversity of students as learners and offer powerful programs that provide the differentiated learning opportunities that will accelerate the achievement of all students.
2. Develop district policies focused on meeting the learning needs of all students.
3. Develop community partnerships to support students at home, in the community, and at school.

4. Identify and implement the variety of programs and curricula that will accelerate the learning of diverse students.
5. Provide district-wide professional development about learner diversity and the differentiated instruction necessary to maximize the learning of all students.
6. Provide timely and robust data analysis directly relevant to making improvements in instruction and achievement for diverse learners.
7. Monitor individual student growth throughout the school year and analyze aggregated data by school and subgroup.
8. Identify mid-course corrections to address newly-identified student needs and overcome achievement gaps.
9. Partner with school staff, student families, and students to ensure a common commitment to intensive efforts to increase student achievement.

For School

1. Recognize the diversity of students as learners and offer powerful programs that provide the differentiated learning opportunities that will accelerate the achievement of all students.
2. Commit to time for faculty to:
   - engage in discussions of the needs of diverse learners and how those needs can be identified in the classroom;
   - identify and use school-wide strategies for addressing those needs; and,
   - identify the methods and criteria for monitoring the success of these strategies.
3. Implement the shared strategies and monitor them to make mid-course corrections as needed.
4. Develop community support for the school and its work among parents and the surrounding community; provide them with meaningful action opportunities.
5. Communicate clearly within the school and the school community about the achievement of diverse groups of students, analyzing ongoing school successes and challenges, and committing to continuous improvement in the achievement of all students.

References and Resources

The following resources describe systemic reforms intended to serve all learners in their full diversity.

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Identifying Students in Need of Support or Intervention

Center on Instruction

Students differ in their instructional and support needs, and successful instruction and effective support acknowledges these differences. Screening for skill deficits and monitoring progress at regular intervals are effective ways of identifying students needing support (Elliott & Fuchs, 1997) or intervention beyond the typical instructional program to the extent that selected measures or indicators (1) are aligned with the content being taught, (2) provide reliable and valid information on student status at a point in time or student progress from one point in time (Wanzek et al., in press), and (3) yield timely and useable data that are accessible by SEA, LEA, school, and classroom educators. Screening and progress monitoring measures are well established in reading for early grades (Deno, 2003a, 2003b) and, increasingly, in early mathematics (Clark & Shinn, 2004; Foegen & Deno, 2001; Vanderheyden et al., 2004). Similar measures for higher grade levels (Espin & Deno, 1994; Espin & Tindal, 1994), for content areas other than reading and mathematics, and for non-content areas (school drop-out, behavior) are also emerging.

Action Principles

For State

1. Assist LEAs with the selection or adoption of high-quality screening and progress monitoring measures and systems for managing, aggregating, and reporting data.
2. Build LEA capacity related to screening and monitoring by providing targeted and ongoing technical assistance and, when appropriate, large-scale professional development to pre-service and in-service teachers and other school and district personnel on the administration of screening and progress monitoring measures, on efficient and reliable data management, and on the strategic use of data to make decisions about student instructional and support needs.

For District

1. Support and participate in the identification of reliable and valid screening and progress monitoring measures in cases where measures are not adopted at the SEA level.
2. Provide important ongoing and targeted professional development on these measures and on using resulting data.
3. Consider the use of electronic databases for housing and managing screening and progress monitoring data. They increase accuracy, real-time accessibility, and facilitate the multi-purpose use of data (e.g., identifying effective programs, areas needing additional professional development, etc.).

For School

1. Implement screening and progress monitoring vertically and horizontally (across grades and within grades).
2. Use screening and progress monitoring data to identify students in need of assistance and to make instructional decisions (e.g., identify skill deficits, differentiate instruction, establish intervention/tutoring groups, etc.). Monitor student progress to ensure that interventions provided to students are effective.

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Support for Students with Disabilities

Center on Instruction

Support for students with disabilities in the least restrictive environment involves using high-quality, research-based instructional strategies designed to enable progress in the general curriculum and preparation for adult life (IDEA, 2004). Supporting students with disabilities can include collaboration between general and special education teachers (Hollingsworth, 2001; Sindelar, Shearer, Yendol-Hoppey, & Liebert, 2006), application of universal design for learning principles and practices (Hitchcock, Meyer, Rose, & Jackson, 2002), and the creation of a climate of inclusion and multicultural responsiveness (Montgomery, 2001; Turnbull, Turnbull, Shank, & Smith, 2004).

Action Principles

For State

1. Provide technical assistance and professional development for both pre-service and in-service educators and related professionals in research-based instructional strategies across academic and functional skills areas.
2. Facilitate collaborative relationships, stakeholder consensus, and funding opportunities (Sopko, 2009).

For District

1. Identify and address the instructional needs of individual schools.
2. Build consensus among stakeholders and administrators regarding the importance of high-quality, research-based instruction, collaboration between general and special educators, student access to the general curriculum, and multicultural responsiveness.
3. Offer administrative supports through district coordination of specialized services for students with disabilities (e.g. transition support, disability specific services, preschool services, 18+ programs).
4. Provide professional development and technical assistance to schools regarding high-quality, research-based instruction, collaboration between general and special educators, student access to the general curriculum, and multicultural responsiveness (Sopko, 2009).

For School

1. Require high-quality, research-based instruction in academic and functional skills areas. These skills areas may include: (a) reading (Rivera, Moughamian, Lesaux, & Francis, 2008; Scammacca, Vaughn, Roberts, Wanzek, & Torgesen, 2007); (b) writing (Center on Instruction, 2007); (c) mathematics (Gersten, Chard, Jayanthi, Baker, Morphy, & Flojo, 2008; Jayanthi, Gersten, & Baker, 2008); (d) social/emotional skills (Denning, 2007; Maag, 2006); (e) vocational skills (Chadsey, 2007); and (f) functional life skills (Davis & Rehfeldt 2007).
2. Provide time and professional development to promote collaboration between general and special education teachers (Hollingsworth, 2001), apply universal design for learning principles and practices (Hitchcock et al. 2002; Sindelar et al., 2006), and create a climate of inclusion and multicultural responsiveness (Montgomery, 2001; Turnbull et al. 2004).

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Support for English Language Learners

Center on Instruction

English language learners (ELLs) face a unique set of educational challenges due to the central role played by academic language proficiency in the acquisition and assessment of content-area knowledge. Proficiency in academic language improves ELLs' ability to comprehend and analyze texts, write and express themselves effectively, and acquire and demonstrate academic content knowledge across all areas (Dressler, 2006). Therefore, effective instruction of ELLs must attend to their need to develop proficient academic language skills in English (Francis et al., 2006).

Action Principles

For State

1. Provide technical assistance and professional development to school districts and school personnel as they select and implement curricula as well as instructional models and programs that best fit the needs of their ELL population.

For District

1. Provide technical assistance to schools on a) how to capitalize on ELLs' proficiency in first-language literacy to help them acquire a second language and content knowledge, b) how to make data-based decisions that would facilitate the alignment between instructional needs and the learning environment, and c) how to implement effective use of linguistic accommodations as they acquire English language proficiency.

For School

1. Provide instruction of academic language that is direct, explicit, and systematic.
2. Curricula must include guided instruction in vocabulary (including the multiple meanings of many English words), sentence structure, and syntax as well as the organization of expository paragraphs, the function of transition words and phrases, and the range of words that appear more often in text than in oral conversation (Gersten et. al., 2007; Rivera et. al., 2008; Torgesen et. al., 2007).

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Addressing Social-Emotional Learning

Center on Innovation & Improvement

Social and emotional learning (SEL) is a powerful strategy for helping all students achieve well-being and school success (Payton et al., 2008; Zins et al., 2004). SEL refers to the acquisition of skills that allow students to calm themselves when angry or anxious, focus their attention, persist toward goals, make friends, resolve conflicts respectfully, and make ethical and safe choices. SEL is based on research demonstrating that our emotions and relationships affect how and what we learn. SEL focuses on five core groups of social and emotional competencies:

- Self-awareness—accurately assessing one's feelings, interests, and strengths; maintaining a well-grounded sense of self-confidence.
- Self-management—regulating one's emotions to handle stress, control impulses, and persevere in overcoming obstacles; achieving personal and academic goals; expressing emotions appropriately.
- Social awareness—being able to empathize with others; appreciating individual and group similarities and differences; effectively using family, school, and community resources.
- Relationship skills—interacting cooperatively with others; resisting inappropriate social pressure; dealing effectively with interpersonal conflict; seeking help when needed.
- Responsible decision-making—making decisions based on factors such as ethical standards, safety concerns, social norms, respect for others, and likely consequences; applying decision-making skills to daily situations.

In collaboration with university-based research teams, the Collaborative for Academic, Social, and Emotional Learning (CASEL) has conducted a rigorous quantitative review (meta-analysis) of more than 200 school-based studies on SEL involving approximately 270,000 children and youth in the general classroom (Durlak et al., in press). The study found that SEL programs demonstrated the following positive outcomes:

- Academic performance, including substantial increases in achievement test scores.
- SEL skills, including empathy, self-awareness, and self-management skills.
- Attitudes about self, others, and school—students showed greater motivation to learn and deeper commitment to school.
- Pro-social behavior—examples include increased time devoted to schoolwork, better classroom behavior, and improved attendance and graduation rates.
- Decreased problem behavior—studies found reductions in disruptive class behavior, aggression, delinquent acts, and disciplinary referrals.

The same research showed that SEL skills can be taught, and they can be taught by regular classroom teachers in schools of every type (rural, urban, and suburban) and to students of every background.

Action Principles

For State

1. Create a statewide SEL leadership team involving key stakeholders.
2. Develop policies, plans, and guidelines promoting integration of SEL into school improvement plans.
3. Disseminate information to educators and the public about advances in research, practices, and policies that foster the social, emotional, and academic growth of students.
4. Establish demonstration sites for SEL implementation.
5. Provide resources to support SEL in schools (training, coaching, funding for evidence-based curricula, assessment).

For District

1. Develop an implementation and phase-in plan for SEL based on an assessment of district resources and needs.
2. Pick high-quality, evidence-based SEL programs that have effective implementation support systems.
3. Provide professional development that fosters a deep understanding of SEL at both the district and school level.
4. Provide coaching to support the quality of teachers' SEL practice.
5. Utilize assessment tools developed specifically to monitor and improve SEL processes and outcomes for ongoing improvement.
6. Integrate SEL strategies and practices with academic areas and student support.
7. Identify principals who will make a commitment to school-wide SEL implementation and integration.

For School

1. Develop a cadre of leaders within the school who understand and support SEL and who will function as the school's SEL leadership team.
2. Provide time and resources for intensive professional development and coaching, including peer coaching, so that SEL is integrated at every grade and across the curriculum.
3. Communicate regularly with families and the school-community about SEL progress and successes.

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Providing Community Supports and Resources

Center on Innovation & Improvement

The community can be a great resource for school improvement. By enlisting municipal offices in support of its improvement efforts, a district can create a broad base of community support for, and understanding of, dramatic measures such as restructuring when they become necessary. Case studies and other research provide evidence of myriad types of community supports and resources being utilized by schools and districts.

Partners can include large corporations and small businesses, law enforcement, health departments, universities, faith-based and other non-profit organizations, senior citizens, and parents, among others. Some schools have formed beneficial alliances with municipal officials and the media (Brooks, 2009). Benefits provided range from providing extra adults who listen to children read (Doiron & Lees, 2009) to donated funds or goods. One example of community support connects chronically absent students with community mentors and has measurably reduced students' chronic absenteeism (Sheldon & Epstein, 2004). In other examples, grants provided funds to hire a school nurse and social worker to attend to students' physical, social, and emotional needs and to help involve parents; church volunteers organized a mentoring program (Tripses & Scroggs, 2009); and rural schools benefited from working with community-based and faith-based organizations who provided tutoring and other after-school programs. Connecting with the community can help high school students engage and see the relevance of their coursework (Kennelly & Monrad, 2007), and evidence shows that students with disabilities benefit greatly from community employment experience during the high school years (e.g., work-study jobs, paid work experiences, and high school vocational education experiences; Stodden et al., 2001).

Cultural, linguistic, and social gaps often exist between schools and the students and families they serve; community groups or individuals, such as paraprofessionals or teachers from the school's neighborhood, may serve as bridging intermediaries to foster more productive relationships (Brown & Beckett, 2007; Reed, 2009; Warren, 2007). During a restructuring effort, Chicago worked to engage the community productively by initiating partnerships with grassroots organizations that helped parents understand why reform was necessary in their children's schools.

Educators desiring effective partnerships are advised to prioritize the process, permit time for development, and promote community ownership (Sanders & Lewis, 2005). One study indicated that the majority of the partnerships in studied schools were teacher-initiated, with articulated needs based on a determination of students' and programs' needs. Processes used to develop the partnerships, such as networking, meetings in person, and the negotiation of partnership activities themselves created "win-win" relationships for the school and the community partner (Hands, 2005).

Action Principles

For District

1. Include municipal and civic leaders, community and faith-based organizations, and parent groups in school reform and restructuring planning; maintain regular communication with them.
2. Assist school leaders in networking with potential partners and in developing partnerships.
3. Provide professional development for school leaders regarding effective collaboration.
4. Direct extra resources to support innovative partnerships between community partners and schools and allow the kind of flexibility in policies that partnerships may require.

For School

1. Assess areas of need and identify potential community partners who might address needs.
2. Allow time for school leaders to meet partners in person and develop "win-win" relationships.

3. Negotiate partnership activities, communicate regularly with partners, publicly recognize partners, and continuously evaluate partnerships for continuous improvement and sustained relationships.
4. Recognize and support the bridging role that local teachers and staff members may play.

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See also archives of the School Community Journal at: www.families-schools.org

Providing Effective Tutoring

Center on Instruction

Tutoring is generally understood as instruction beyond what is provided in a normal school day. Tutoring may occur during non-instructional periods of the school day, before or after school, or during weekends. It often occurs in small group settings and may focus on remediating missing skills, assisting with homework, or, for students not at risk or struggling, on extending learning (e.g., SAT preparation). For struggling students, tutoring often addresses the first two of these three purposes. In terms of purpose one (remediating missing skills), and particularly for older struggling students, tutoring "fills in" skills students need to perform at or above grade-level expectations. For younger students, tutoring may also be effective in *preventing* later skill gaps, if at-risk students are identified early in their school careers and provided with effective early intervention (see "Identifying Students in Need of Support or Intervention," elsewhere in this *Handbook*). Whatever its context or purpose, tutoring represents a means of increasing intensity, including instructional time and instructional focus (e.g., smaller groups, homogenous grouping, and direct instruction of skills). Peer tutoring models (Fuchs et al., 2001) and the use of well-trained paraprofessionals and volunteers (Foorman & Al Otaiba, 2009; Morris, 2006) represent promising, cost-efficient models for increasing intensity.

Action Principles

For State

1. Establish "validated curricula" and specify professional development requirements for paraprofessionals. LEAs and schools may benefit from professional development on the effective use and management of paraprofessionals and volunteers for tutoring (Elbaum, Vaughn, Hughes, & Moody, 2000).
2. Review policies regulating the use of non-instructional time (e.g., recess time and special areas time). LEAs and schools may need guidance on providing small-group tutoring opportunities during the regular school day.

For District

1. Peer tutoring as a validated intervention requires considerable teacher skill to be effective; provide intensive and ongoing professional development on peer tutoring. (Fuchs et al., 2001).
2. Provide guidance to building administrators and instructional leaders on how to identify effective tutoring, whether delivered by volunteers, paraprofessionals, or peers.
3. Provide support and guidance to building administrators and instructional leaders on correcting poorly conceived tutoring strategies, remedying ineffective application of tutoring strategies, and modeling effective tutoring practices.

For School

1. Support the hiring and monitoring of paraprofessional tutors, recruiting and screening volunteer tutors, and supporting teachers who implement peer tutoring. All three groups need guidance on procedures for managing these functions.
2. Align tutoring content with student needs and with classroom-provided instruction to yield the best results (Elbaum et al., 2000).

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Addressing Middle to High School Transitions

National High School Center

The transition from middle to high school is a critical point in a student's academic career. Research indicates that this time is often characterized by increased disengagement and a decline in grades, motivation, and attendance. Furthermore, many students enter ninth grade lacking the preparation to successfully navigate the new academic and social demands of high school. Failure to meet these challenges is linked to school failure and highlights the fact that students' experiences during their first year of high school have significant implications for their success throughout high school. Specifically, unsuccessful transition to high school is associated with higher dropout rates, delayed graduation rates, and low achievement (Herlihy, 2007). It is also important to note that these challenges are more prevalent in urban, high-poverty schools and among African American and Latino students and students with disabilities (NHSC, 2007a; 2007b). To help address this issue, educators need to provide students with the necessary academic and socio-emotional supports to make a smooth transition from middle school to high school. Research supports the implementation of transition programs and suggests that these interventions are linked to positive student outcomes such as higher student engagement and lower dropout rates (NHSC, 2007a; 2007b).

Efforts to help ease students' transition to high school can begin during the summer months before the start of ninth grade. Summer programs provide opportunities to prepare at-risk students by offering academic and social supports. Educators can also continue to support students' transition to high school by the following actions (more information on these actions can be found in other sections of this *Handbook*):

- Establishing a data and monitoring system that will both diagnose why students are struggling and serve as an accountability measure for districts and schools;
- Addressing the instructional needs of struggling students who enter high school unprepared for rigorous, college-preparatory coursework by providing targeted instruction that gives them the opportunity to catch up while also ensuring that they are challenged and engaged in learning;
- Creating personalized learning environments to decrease students' sense of anonymity and address individual needs;
- Building instructional and leadership capacity in low-achieving schools to address the diverse student needs and ensure that struggling students are taught by highly-qualified teachers; and
- Helping students to see the relevance of their coursework by engaging families and creating connections with the community, employers, and institutes of higher education.

Action Principles

For State

1. Create a longitudinal data monitoring system to gather and track information on the number of incoming ninth grade students who are and are not prepared to take college-preparatory English and mathematics courses.
2. Require districts to report the outcomes of their transition program and use this information as an accountability measure of student outcomes related to the transition to high school.
3. Identify and disseminate research-based readiness indicators and benchmarking guidelines and tools to help districts and schools identify students who need extra support in the ninth grade.
4. Provide guidelines on how to offer accelerated curricula to help boost the mathematics and reading skills of struggling students during the first semester of high school.

5. Provide guidelines on how middle and high schools can work together to prepare more students for high school.

For District

1. Integrate "on-track" indicators into accountability systems. Include other indicators based on local context, as appropriate.
2. Provide guidelines on how schools can intervene to assist students with the transition.
3. Engage with community agencies to plan and coordinate appropriate social supports.
4. Provide professional development to train teachers on working with struggling students.
5. Provide adequate resources and support for schools that choose to implement structural changes (e.g., creating smaller learning communities), specialized curricula, and summer transition programs.
6. Develop strategies to attract, retain, and assign highly-qualified teachers.
7. Provide state with report of progress and challenges of transition programs as well as plans to improve program effectiveness.

For School

1. Use data from early warning systems to identify students in need of extra assistance and to inform instructional approaches and interventions.
2. Implement a curriculum or intervention designed to support students who enter high school unprepared to succeed in rigorous coursework (e.g., accelerated instruction—see more information on this topic elsewhere in this *Handbook*).
3. Engage and create partnerships with the community, employers, institutes of higher education, and families in support of student academic and social needs.
4. Communicate to families what ninth graders are expected to know and be able to do to succeed in high school.
5. Increase opportunities for positive adult and student interactions.
6. Align instruction with career and other postsecondary opportunities.

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Engaging Families in Student Learning

Center on Innovation & Improvement

The "curriculum of the home"—the bundle of attitudes, habits, knowledge, and skills that children acquire through their relationship with their family and that facilitates their school learning—is more predictive of academic learning than the family's socioeconomic status (Marzano, Pickering, & Pollock, 2001; Redding, 2000). In his meta-analysis, Jeynes (2002) found the nuances of parent-child communication regarding expectations to be a particularly powerful source of motivation for minority children and children living in poverty. These children especially benefit from visions of what is possible for them beyond the circumstances in which they find themselves at the time, and their parents contribute both to that vision and to the children's confidence that they can reach out and attain it (Hoover-Dempsey, 2005).

Research shows that schools can improve their students' learning by engaging parents in ways that directly relate to their children's academic progress, maintaining a consistent message of what is expected of parents, and reaching parents directly, personally, and with a trusting approach (Epstein, 1995; Henderson & Mapp, 2002; Patrikakou, Weissberg, Redding, & Walberg, 2005; Redding, 2000). These echo the conclusions of Swap (1993) that effective parent engagement must be comprehensive in nature, with the school consistently interfacing with parents at many points, in many venues, over the course of the schooling years. This is vital for all students at all grade levels, in all settings (urban to rural), and even more so for those with disabilities and English language learners. Epstein's (1995) typology of family involvement in education has become the standard of the field and appears in various adaptations, including the National Standards for Family-School Partnerships from the national PTA (n.d.). A comprehensive family-school partnership (which Epstein defines as an ongoing relationship rather than a program or event) addresses all six types of family involvement: parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community.

Action Principles

For States

1. Provide training opportunities for districts and schools on how to include parents in the improvement process and track evidence that strategies are being implemented.
2. Ensure that district and school improvement plans include specific plans for parent engagement and structured communication with parents and a way to evaluate the implementation of these planned strategies.
3. Provide sample documents and templates to assist schools in communicating with parents.

For Districts

1. Adopt formal district-level policies that address issues related to outreach to and engagement of families from diverse populations.
2. Assist schools in building capacity to engage all families in their children's learning.

For Schools

1. Establish a site-based council (e.g., School Community Council) comprised of the principal, parent facilitator, social worker or counselor, and parents of current students (non-school employees) that meets regularly and includes family-school relationships as a major element of its work.
2. Expect and monitor sound homework practices and two-way communication with parents.
3. Give parents practical, jargon-free guidance on ways to maintain supportive verbal interaction with their children, establish a quiet place for study at home, encourage good reading and study habits, and model and support respectful and responsible behaviors.
4. Provide culturally and linguistically appropriate opportunities for parents to meet with one another to encourage the sharing of norms, standards, and parenting concerns and successes.

5. Provide teachers and staff with professional development and consistent policies to build their capacity to work with all families and to reinforce the school's clear expectations of parents. This includes promoting a strengths-based (rather than deficit-based) view of families.

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Establishing a Supportive School Climate and an Effective Approach to Discipline

Center on Innovation & Improvement

A safe, orderly school climate is one of several characteristics of schools that consistently show good achievement gains (Redding, 2006). Individuals' experiences of school climate are shaped by perceptions of safety, teaching and learning, interpersonal relationships (including among students, among adults, and between students and adults), and the institutional environment (Center for Social and Emotional Education, n.d.). When considering climate, the evidence of the close relationship between academic and behavioral difficulties calls for integrating intervention efforts through a single system that can monitor progress in both areas and respond accordingly with intervention as needed (Center on Instruction, 2008). Positive relationships and effective classroom management strategies are necessary to establish contexts that support the academic and behavioral competence of all students at all grade levels, including students with disabilities, and they can also promote student connectedness and reduce behavior problems, achievement gaps, dropout rates, and teacher attrition (Blum, McNeely, & Rinehart, 2002; Kennelly & Monrad, 2007; National High School Center, 2008; Oliver, 2007). Positive Behavior Intervention and Support (PBIS) and other similar frameworks or programs may provide a more consistent school climate by helping educators structure the environment and provide positive reinforcement (see http://www.pbis.org/). Schools using a social and emotional learning (SEL) framework explicitly teach SEL skills and foster an overall climate of inclusion, warmth, and respect, which can prevent bullying and promote educational success (Ragozzino & Utne O'Brien, 2009).

Several cited examples of "quick win" turnaround catalysts used by leaders as levers for change are related to improving school climate: significantly reduce discipline referrals by altering class transition schedules; reduce truancy by locking superfluous entrances and communicating to parents that the school day is protected instructional time; and improve the physical plant by cleaning up debris and painting walls (Public Impact, 2007). Case study schools have improved school climate with a number of methods, including: administrators increasing their visibility in the community and building trust relationships; adopting a college-bound focus; implementing approaches such as a proactive behavioral program, support for healthy lifestyles, and an emphasis on local historical culture; increasing communication via partnerships with faith organizations; requiring teachers to meet with families; improving the physical plant; targeting students known for making the school feel unsafe and implementing a consistently enforced discipline policy; implementing positive behavior supports; switching middle school students to self-contained classrooms (citing stronger teacher-student relationships, increased safety, and decreased time in transition); and requiring staff to emulate the actions and behavior they expect from their students (Brinson, Kowal, & Hassel, 2008; Brinson & Rhim, 2009).

Action Principles

For District

1. Provide professional development and/or peer coaching to support teachers and administrators as they manage school and classroom climate and promote positive behaviors.
2. Communicate and teach social and emotional learning standards for all students (required in some areas, examples available at http://www.casel.org/standards/learning.php).
3. Implement strategies or programs in large schools (such as smaller learning communities) to encourage the development of supportive relationships.
4. Address physical plant needs to ensure schools are clean, attractive, and safe.

For School

1. Link individual classroom management strategies to the schoolwide behavioral support system.

2. Utilize effective universal classroom management practices for all students and then determine which students need additional support and more individualized interventions.
3. Ensure that the relationships between and among students and adults in the school are grounded in respect and trust by providing high expectations, fair and consistent discipline, and by modeling and teaching good social, emotional, and academic skills.
4. Collect and use data regarding discipline and school climate to guide decision making.
5. Provide opportunities for celebration and association—face-to-face connection among members of the school community.

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Strategies that Build Relationships

National High School Center

Common features of the American comprehensive high school are depersonalization and a lack of a sense of community (Lee & Smith, 2001). Yet research strongly suggests that establishing a climate of social, emotional, and academic supports for students is central to improving conditions for learning and thriving in high school. Two practices generally associated with successful reform in low-performing high schools are personalized learning environments and establishing mechanisms that assist students in developing social networks and instrumental relationships (Martinez & Klopott, 2005; Quint, 2006). Strategies for building relationships between students as well as between students and school faculty include:

- Smaller learning communities (SLC) which structure larger school populations into smaller groups of students and teachers. These structures are designed to foster school environments in which healthy, trusting, interpersonal relationships between students and faculty can thrive (Cohen, 2001; Jerald, 2006). Academies are a popular form of smaller learning communities that are typically organized by career aspiration such as a program designed to prepare students for engineering coursework in college. Academies are also commonly organized by grade-level, such as ninth-grade academies designed to ease the transition from middle to high school (Herlihy, 2007a). (For more information, see Chapter 4 in this *Handbook*.)
- Guidance and mentoring programs, such as student advisories which reserve time for students to meet one-on-one and/or in small groups with trained faculty advisors to create a sense of community (Herlihy, 2007b).
- A system of tiered interventions designed to prevent and remediate documented concerns led by teams of teachers, specialists, and administrators that offer targeted support and monitoring for the social, emotional, and academic well-being of students school-wide, specific student groups (e.g., ninth graders, learning disabled, English language learners) and individual students according to their risk factors (e.g., failing grades, poor attendance, suspensions) (National High School Center, 2007). (For more information, see Chapter 7 on "Using Response to Intervention" in this *Handbook*.)
- Student leadership development programs designed to engage and enlist students in needs assessment exercises and the school improvement planning process.

Action Principles

For State

1. Develop student-level and school environment assessment tools to be used by schools that can guide decision-making about what interventions to put into place in response to students at risk for school failure due to academic, social, and/or behavioral issues.
2. Gather and report indicators on key student risk factors such as readiness for high school-level coursework in the form of reports, guidelines, and checklists that districts and schools can use to determine which students need extra support.

For District

1. Determine district-wide strategies for increasing personalization (e.g., smaller learning communities, academies, etc.).
2. Refine and provide technical support for school data collection and retrieval systems to provide the infrastructure to identify and implement targeted interventions for students who are disengaged from school.

For School

1. Partner with parents and community stakeholders to foster awareness of and support for building and sustaining effective relationships.

2. Consider ninth grade academies and summer transition programs to facilitate student transition into high school.
3. Offer programming such as student advisories to set a foundation for positive discipline school-wide and to connect all students to the school environment.
4. Use a data-driven process to prevent problem behavior. One example is Positive Behavioral Interventions and Supports (PBIS), a data-driven decision-making framework that directs the selection, integration, and implementation of the best evidence-based academic and behavioral practices and systems for improving important outcomes for all students.
5. Institutionalize opportunities for students to participate in the process of improving the school climate, safety, and learning.
6. Identify and train teachers, specialists, and administrators to serve on tiered intervention teams that develop and lead school-wide, targeted, and individual student support programs.

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Appendix: Federal Guidance A:15

Indicators of Effective Practice (School) *Center on Innovation & Improvement*

Indicators of Effective Practice (District) *Center on Innovation & Improvement*

Rapid Improvement Leader Indicators *Center on Innovation & Improvement*

Eight Elements of High School Improvement *National High School Center*

Federal Guidance A:15

From http://www2.ed.gov/programs/sif/sigguidance11012010.pdf

A-15. How can an SEA determine academic achievement in terms of proficiency of the "all students" group on the State's reading/language arts and mathematics assessments combined to develop one list of schools that will enable it to identify the persistently lowest-achieving schools in the State? To determine the persistently lowest-achieving schools in the State in terms of academic achievement, an SEA must rank each set of schools—i.e., Title I schools in improvement, corrective action, or restructuring and secondary schools eligible for, but that do not receive, Title I funds—from highest to lowest in terms of proficiency of the "all students" group on the State's reading/language arts and mathematics assessments combined. Accordingly, the SEA must have a way to combine different proficiency rates between reading/language arts and mathematics for each school. There are likely a number of ways an SEA may do this. Below, we give two examples.

EXAMPLE 1

Single Percentage Method

Numerator:

Step 1: Calculate the total number of proficient students in the "all students" group in reading/language arts by adding the number of proficient students in each grade tested in a school. Calculate the total number of proficient students in the "all students" group in mathematics by adding the number of proficient students in each grade tested in the school.

Step 2: Add the total number of proficient students in reading/language arts and mathematics.

Denominator:

Step 3: Calculate the total number of students in the "all students" group in the school who took the State's reading/language arts assessment and the total number of students in the "all students" group who took the State's mathematics assessment.

Step 4: Add the total number of students in the "all students" group in the school who took the State's reading/language arts assessment and the total number of students in the "all students" group who took the State's mathematics assessment.

Note: In counting the total number of students who are proficient and the total number of students assessed, include the number of proficient students with disabilities who took an alternate assessment (based on alternate academic achievement standards or modified academic achievement standards) and the total number of students with disabilities who took an alternate assessment.

Step 5: Divide the numerator by the denominator to determine the percent proficient in reading/language arts and mathematics in the school.

Step 6: Rank the schools in each relevant set of schools from highest to lowest using the percentages in Step 5.

EXAMPLE 2

Adding Ranks Method

Step 1: Calculate the percent proficient for reading/language arts for every school in the relevant set of schools using the most recent assessment data available. (Use the same data that the State reports on its report card under section 1111(h)(1)(C)(i) of the ESEA for the "all students" group.)

Step 2: Calculate the percent proficient for mathematics for every school in the relevant set of schools using the most recent assessment data available. (Use the same data that the State reports on its report card under section 1111(h)(1)(C)(i) of the ESEA for the "all students" group.)

Step 3: Rank order schools based on the percent proficient for reading/language arts from the highest percent proficient to the lowest percent proficient. The highest percent proficient would receive a rank of one.

Step 4: Rank order schools based on the percent proficient for mathematics from the highest percent proficient to the lowest percent proficient. The highest percent proficient would receive a rank of one.

Step 5: Add the numerical ranks for reading/language arts and mathematics for each school.

Step 6: Rank order schools in each set of schools based on the combined reading/language arts and mathematics ranks for each school. The school with the lowest combined rank (e.g., 2, based on a rank of 1 for both reading/language arts and mathematics) would be the highest-achieving school within the set of schools and the school with the highest combined rate would be the lowest-achieving school within the set of schools.

From: Guidance on Fiscal Year 2010 School Improvement Grants Under Section 1003(g) of the Elementary and Secondary Education Acto of 1965. U. S. Department of Education, Office of Elementary and Secondary Education. (November 1, 2010)

Indicators of Effective Practice (School)

Center on Innovation & Improvement

Complete list is for Continuous School Improvement
Italicized indicators are for Rapid School Improvement

From *Handbook on Restructuring and Substantial School Improvement*
School Community Indicators from *The Mega System: Deciding. Learning. Connecting.*
See these sources for explication and underlying research.
Downloadable from: www.centerii.org

I. Leadership and Decision-Making

A. Team Structure

Effective Practice: Establish a team structure with specific duties and time for instructional planning.

Indicators of Effective Practice

1. *A team structure is officially incorporated into the school improvement plan and school governance policy.*
2. *All teams have written statements of purpose and by-laws for their operation.*
3. *All teams operate with work plans for the year and specific work products to produce.*
4. *All teams prepare agendas for their meetings.*
5. *All teams maintain official minutes of their meetings.*
6. *The principal maintains a file of the agendas, work products, and minutes of all teams.*
7. *A Leadership Team consisting of the principal, teachers who lead the Instructional Teams, and other key professional staff meets regularly (twice a month or more for an hour each meeting).*
8. *The Leadership Team serves as a conduit of communication to the faculty and staff.*
9. The Leadership Team shares in decisions of real substance pertaining to curriculum, instruction, and professional development.
10. *The school's Leadership Team regularly looks at school performance data and aggregated classroom observation data and uses those data to make decisions about school improvement and professional development needs.*
11. *Teachers are organized into grade-level, grade-level cluster, or subject-area Instructional Teams.*
12. Instructional Teams meet regularly (twice a month or more for 45 minutes each meeting) to conduct business.
13. *Instructional Teams meet for blocks of time (4 to 6 hour blocks, once a month; whole days before and after the school year) sufficient to develop and refine units of instruction and review student learning data.*
14. A School Community Council consisting of the principal, parent facilitator, social worker or counselor, and parents oversees family-school relationships and the curriculum of the home.
15. A majority of the members of the School Community Council are parents of currently enrolled students and are not also employees of the school.
16. The School Community Council meets regularly (twice a month for an hour each meeting).

B. Principal's Role

Effective Practice: Focus the principal's role on building leadership capacity, achieving learning goals, and improving instruction.

Indicators of Effective Practice

1. The principal makes sure everyone understands the school's mission, clear goals (short term and long term), and their roles in meeting the goals.
2. The principal develops the leadership capacity of others in the school.
3. The principal communicates the likelihood of success based on the plan and hard work.
4. The principal models and communicates the expectation of improved student learning through commitment, discipline, and careful implementation of sound practices.

5. *The principal participates actively with the school's teams.*
6. *The principal keeps a focus on instructional improvement and student learning outcomes.*
7. *The principal monitors curriculum and classroom instruction regularly.*
8. *The principal spends at least 50% of his/her time working directly with teachers to improve instruction, including classroom observations.*
9. *The principal challenges, supports, and monitors the correction of unsound teaching practices.*
10. *The principal celebrates individual, team, and school successes, especially related to student learning outcomes.*
11. The principal provides incentives for teacher and student accomplishment.
12. The principal personally engages parents and the community in the improvement process.
13. *The principal offers frequent opportunities for staff and parents to voice constructive critique of the school's progress and suggestions for improvement.*

II. Professional Development

Effective Practice: Align classroom observations with evaluation criteria and professional development.

Indicators of Effective Practice

1. *The principal compiles reports from classroom observations, showing aggregate areas of strength and areas that need improvement without revealing the identity of individual teachers.*
2. *The Leadership Team reviews the principal's summary reports of classroom observations and takes them into account in planning professional development.*
3. *Professional development for teachers includes observations by the principal related to indicators of effective teaching and classroom management.*
4. *Professional development for teachers includes observations by peers related to indicators of effective teaching and classroom management.*
5. *Professional development for teachers includes self-assessment related to indicators of effective teaching and classroom management.*
6. *Teachers are required to make individual professional development plans based on classroom observations.*
7. *Professional development of individual teachers includes an emphasis on indicators of effective teaching.*
8. *Professional development for the whole faculty includes assessment of strengths and areas in need of improvement from classroom observations of indicators of effective teaching.*
9. *Teacher evaluation examines the same indicators used in professional development.*
10. *The principal plans opportunities for teachers to share their strengths with other teachers.*

III. Parents and Learning

Effective Practice: Help parents to help their children meet standards.

Indicators of Effective Practice

1. Parent policies, activities, and programs cultivate the "curriculum of the home."
2. Parents receive regular, jargon-free communication about learning standards, their children's progress, and the parents' role in their children's school success.
3. Parents receive practical guidance to maintain regular and supportive verbal interaction with their children.
4. Parents receive practical guidance to maintain daily conversations with their children about their school experiences and progress.
5. Parents receive practical guidance to establish a quiet place for children's studying at home and consistent discipline for studying at home.
6. Parents receive practical guidance to encourage their children's regular reading habits at home.
7. Parents receive practical guidance to model and encourage respectful and responsible behaviors.
8. Parents are given opportunities to meet with each other to share their child-rearing concerns and successes.
9. Parents are given opportunities to meet with teachers to discuss both their children's progress in school and their children's home-based study and reading habits.

10. Parent involvement policies, classroom visit policies, and homework policies are clear, constructive, and frequently communicated to parents and teachers.
11. The faculty, students, and parents regularly discuss the school's Compact that outlines key expectations of students, parents, and teachers.
12. The student report card shows the student's progress in meeting learning standards.
13. The student report card provides parents an opportunity to report on the student's home-based studying and reading habits.

IV. Curriculum, Assessment, and Instructional Planning

A. Aligned Instruction

Effective Practice: Engage teachers in aligning instruction with standards and benchmarks.

Indicators of Effective Practice

1. *Instructional Teams develop standards-aligned units of instruction for each subject and grade level.*
2. *Units of instruction include standards-based objectives and criteria for mastery.*
3. Objectives are leveled to target learning to each student's demonstrated prior mastery based on multiple points of data (e.g., unit tests and student work).

B. Classroom Assessment

Effective Practice: Engage teachers in assessing and monitoring student mastery.

Indicators of Effective Practice

1. *Units of instruction include pre-/post-tests to assess student mastery of standards-based objectives.*
2. *Unit pre-tests and post-tests are administered to all students in the grade level and subject covered by the unit of instruction.*
3. *Unit pre-test and post-test results are reviewed by the Instructional Team.*
4. *Teachers individualize instruction based on pre-test results to provide support for some students and enhanced learning opportunities for others.*
5. *Teachers re-teach based on post-test results.*

C. Differentiated Instruction

Effective Practice: Engage teachers in differentiating and aligning learning activities.

Indicators of Effective Practice

1. *Units of instruction include specific learning activities aligned to objectives.*
2. Instructional Teams develop materials for their standards-aligned learning activities and share the materials among themselves.
3. *Materials for standards-aligned learning activities are well-organized, labeled, and stored for convenient use by teachers.*

D. Periodic Assessment

Effective Practice: Assess student learning frequently with standards-based assessments.

Indicators of Effective Practice

1. The school tests every student annually with the same standardized test in basic subject areas so that each student's year-to-year progress can be tracked.
2. *The school tests each student at least 3 times each year to determine progress toward standards-based objectives.*
3. *Teachers receive timely reports of results from standardized and objectives-based tests.*
4. The school maintains a central database that includes each student's test scores, placement information, demographic information, attendance, data, behavior indicators, and other variables useful to teachers.
5. Teams and teachers receive timely reports from the central database to assist in making decisions about each student's placement and instruction.

6. *Yearly learning goals are set for the school by the Leadership Team utilizing student learning data.*
7. *The Leadership Team monitors school-level student learning data.*
8. *Instructional Teams use student learning data to assess strengths and weaknesses of the curriculum and instructional strategies.*
9. *Instructional Teams use student learning data to plan instruction.*
10. *Instructional Teams use student learning data to identify students in need of instructional support or enhancement.*
11. *Instructional Teams review the results of unit pre-/post-tests to make decisions about the curriculum and instructional plans and to "red flag" students in need of intervention (both students in need of tutoring or extra help and students needing enhanced learning opportunities because of early mastery of objectives).*

V. Classroom Instruction

A. Instructional Preparation and Delivery

Effective Practice: Expect and monitor sound instruction in a variety of modes.

Indicators of Effective Practice

Instruction—Preparation

1. *All teachers are guided by a document that aligns standards, curriculum, instruction, and assessment.*
2. *All teachers develop weekly lesson plans based on aligned units of instruction.*
3. All teachers use objectives-based pre-tests.
4. All teachers use objectives-based post-tests.
5. *All teachers maintain a record of each student's mastery of specific learning objectives.*
6. *All teachers test frequently using a variety of evaluation methods and maintain a record of the results.*
7. *All teachers differentiate assignments (individualize instruction) in response to individual student performance on pre-tests and other methods of assessment.*

Instruction—Teacher-Directed—Introduction

1. *All teachers review the previous lesson.*
2. *All teachers clearly state the lesson's topic, theme, and objectives.*
3. *All teachers stimulate interest in the topics.*
4. *All teachers use modeling, demonstration, and graphics.*

Instruction—Teacher-Directed—Presentation

1. All teachers proceed in small steps at a rapid pace.
2. *All teachers explain directly and thoroughly.*
3. *All teachers maintain eye contact.*
4. *All teachers speak with expression and use a variety of vocal tones.*
5. *All teachers use prompting/cueing.*

Instruction—Teacher-Directed—Summary and Confirmation

1. *All teachers re-teach when necessary.*
2. *All teachers review with drilling/class recitation.*
3. *All teachers review with questioning.*
4. *All teachers summarize key concepts.*

Instruction—Interaction

1. *All teachers re-teach following questioning.*
2. All teachers use open-ended questioning and encourage elaboration.
3. All teachers re-direct student questions.
4. All teachers encourage peer interaction.
5. *All teachers encourage students to paraphrase, summarize, and relate.*
6. *All teachers encourage students to check their own comprehension.*
7. *All teachers verbally praise students.*

Instruction—Student-Directed (Group or Individual)

1. *All teachers travel to all areas in which students are working.*
2. All teachers meet with students to facilitate mastery of objectives.
3. All teachers encourage students to help each other with their work.
4. *All teachers interact instructionally with students (explaining, checking, giving feedback).*
5. *All teachers interact managerially with students (reinforcing rules, procedures).*
6. *All teachers interact socially with students (noticing and attending to an ill student, asking about the weekend, inquiring about the family).*
7. All teachers verbally praise students.

Instruction—Computer-Based

1. *Students are engaged and on task.*
2. Students are comfortable with the program and its navigation.
3. All teachers travel about the room to assist students.
4. All teachers have documentation of the computer program's alignment with standards-based objectives.
5. All teachers maintain a record of student mastery of standards-based objectives.
6. *All teachers assess student mastery in ways other than those provided by the computer program.*

B. Homework Practices and Communication with Parents

Effective Practice: Expect and monitor sound homework practices and communication with parents.

Indicators of Effective Practice

1. *All teachers maintain a file of communication with parents.*
2. *All teachers regularly assign homework (4 or more days a week).*
3. *All teachers check, mark, and return homework.*
4. All teachers include comments on checked homework.
5. All teachers count homework toward the student's report card grade.
6. *All teachers systematically report to parents the student's mastery of specific standards-based objectives.*

C. Classroom Management

Effective Practice: Expect and monitor sound classroom management.

Indicators of Effective Practice

1. When waiting for assistance from the teacher, students are occupied with curriculum-related activities provided by the teacher.
2. Transitions between instructional modes are brief and orderly.
3. Students maintain eye contact and are attentive.
4. *Students raise hands or otherwise signal before speaking.*
5. *All teachers use a variety of instructional modes.*
6. *All teachers maintain well-organized student learning materials in the classroom.*
7. All teachers display completed student work in the classroom.
8. *All teachers display classroom rules and procedures in the classroom.*
9. *All teachers correct students who do not follow classroom rules and procedures.*
10. *All teachers reinforce classroom rules and procedures by positively teaching them.*
11. All teachers conduct an occasional "behavior check."
12. All teachers engage all students (e.g., encourage silent students to participate).

VI. School Community

A. Purpose, Policies, and Practices

Effective Practice: Define the purpose, policies, and practices of the school community.

Indicators of Effective Practice

1. The school's homework policy requires homework at all grade levels.
2. The school's homework policy makes homework a part of the student's report card grade.
3. The school's homework policy stresses the importance of checking, marking, and promptly returning homework.
4. The school's mission statement, Compact, and homework policy are included in the school improvement plan.
5. The school recognizes the accomplishments of teams (e. g., teacher teams, school councils).
6. The school regularly and clearly communicates with parents about its expectations of them and the importance of the curriculum of the home.
7. The school maintains a program of home visits by teachers, staff, and/or trained community members.
8. The school's mission statement is distinct, clear, and focused on student learning.
9. The school's Compact outlines the responsibilities/expectations of teachers, parents, and students.
10. The school's Compact includes responsibilities/expectations of parents drawn from the curriculum of the home.
11. The school's Compact is annually distributed to teachers, school personnel, parents, and students.
12. The school's homework policy provides guidelines for the amount of daily study time at home by grade level.
13. The school celebrates its accomplishments.
14. The school recognizes the individual accomplishments of teachers.

B. Communication

Effective Practice: Provide two-way, school-home communication linked to learning.

Indicators of Effective Practice

1. The school's Compact, homework policy, and learning standards are routinely reviewed and discussed at faculty meetings.
2. The school's Compact, homework policy, and learning standards are routinely reviewed and discussed at open houses and parent-teacher conferences.
3. Parent-teacher conferences are held at least twice a year and include students at least once a year.
4. The "ongoing conversation" between school personnel and parents is candid, supportive, and flows in both directions.
5. Teachers regularly make "interactive" assignments that encourage parent-child interaction relative to school learning.
6. The school maintains a program of home gatherings, with groups of parents meeting in a home with a teacher.
7. Teachers are familiar with the curriculum of the home and discuss it with parents.
8. Parents are familiar with the curriculum of the home and discuss it with teachers.

C. Education

Effective Practice: Educate parents to support their children's learning and teachers to work with parents.

Indicators of Effective Practice

1. Parent education programs include some multi-session group experiences with specific agendas.
2. Professional development programs for teachers include assistance in working effectively with parents.
3. Parent education programs are led by trained parent leaders.
4. The school offers parent education programs focused on building skills relative to the curriculum of the home.

D. Connection

Effective Practice: Connect members of the school community to support student learning.

Indicators of Effective Practice

1. The school provides "intragenerational associations" in which students of different ages are brought together to learn.
2. The school provides "intergenerational associations" in which parents or community volunteers assist in the classroom.
3. The school provides opportunities for parents to get to know each other and discuss the curriculum of the home.
4. The school's policies encourage parents to visit classrooms.
5. The school has a parent-friendly document that outlines the rules for parent visits to classrooms.
6. The school sponsors all-school events that include parents, students, and teachers and focus on aspects of student learning.
7. All-school events include parent-child interactive activities.
8. Office and support staff members are trained to make the school a "welcoming place" for parents.

Indicators of Effective Practice (District)

Center on Innovation & Improvement

Effective Practices and Indicators for District Support of School Improvement

Adapted from *Handbook on Restructuring and Substantial School Improvement*
See the *Handbook* sources for explication and underlying research.
Downloadable from: www.centerii.org

I. District Context and Support for School Improvement

Effective Practice: The district provides a framework of district improvement and support for school improvement.

Indicators of Effective Practice

1. The district includes municipal and civic leaders in district and school improvement planning and maintains regular communication with them.
2. The district includes community organizations in district and school improvement planning and maintains regular communication with them.
3. The district includes parent organizations in district and school improvement planning and maintains regular communication with them.
4. The district provides incentives for staff who work effectively in hard-to-staff and restructuring schools.
5. The district contracts with external service providers for key services in restructured schools.
6. The district provides schools with technology, training, and support for integrated data collection, reporting, and analysis systems.
7. The district sets district, school, and student subgroup achievement targets.
8. The school board and superintendent present a unified vision for school improvement.
9. The superintendent and other central office staff are accountable for school improvement and student learning outcomes.
10. The district regularly reallocates resources to support school, staff, and instructional improvement.
11. The district ensures that key pieces of user-friendly data are available in a timely fashion at the district, school, and classroom levels.
12. The district intervenes early when a school is not making adequate progress.
13. The district works with the school to provide early and intensive intervention for students not making progress.
14. The district recruits, trains, supports, and places personnel to competently address the problems of schools in need of improvement.
15. The district allows school leaders reasonable autonomy to do things differently in order to succeed.

II. The Change Process

Effective Practice: The district takes the change process into account in planning and supporting school improvement.

Indicators of Effective Practice

1. The district operates with district-level and school-level improvement teams.
2. The district examines existing school improvement strategies being implemented across the district and determines their value, expanding, modifying, and culling as evidence suggests.
3. For each restructuring school, the district makes reference to guidance from *What Works When* regarding how to assess what the best restructuring options are given its unique district and school context.
4. For each restructuring school, the district ensures that the restructuring options chosen reflect the particular strengths and weaknesses of the restructuring school.

5. For each restructuring school, the district ensures that the restructuring plan reflects the resources available to ensure its success.
6. For each restructuring school, the district ensures that the restructuring plan includes both changes in governance and a detailed plan for school improvement.
7. The district ensures that school improvement and restructuring plans include research-based, field-proven programs, practices, and models.
8. The district ensures that school improvement and restructuring plans include a clear vision of what the school will look like when restructured or substantially improved.
9. The district ensures that an empowered change agent (typically the principal) is appointed to head each restructuring school.
10. In restructuring schools, the district ensures that the change agent (typically the principal) is skilled in motivating staff and the community, communicating clear expectations, and focusing on improved student learning.
11. The district ensures that school improvement and restructuring plans include "quick wins," early successes in improvement.
12. The district is prepared for setbacks, resistance, and obstacles on the path to substantial improvement.
13. The school reports and documents its progress monthly to the superintendent, and the superintendent reports the school's progress to the school board.

III. District-School Expectations

Effective Practice: The district clarifies what it expects from the school and what the school can expect from the district.

Indicators of Effective Practice

1. The district designates a central office contact person for the school, and that person maintains close communication with the school and an interest in its progress.
2. District and school decision makers meet at least twice a month to discuss the school's progress.
3. District policies and procedures clarify the scope of site-based decision making granted a school and are summarized in a letter of understanding.
4. The district provides a cohesive district curriculum guide aligned with state standards or otherwise places curricular expectation on the school.
5. The district provides the technology, training, and support to facilitate the school's data management needs.
6. Professional development is built into the school schedule by the district, but the school is allowed discretion in selecting training and consultation that fit the requirements of its improvement/restructuring plan and its evolving needs.
7. Staff development is built into the schedule for support staff (e.g., aides, clerks, custodians, cooks) as well as classroom teachers.
8. A team structure is officially incorporated into the school improvement plan and school governance policy.
9. All teams have written statements of purpose and by-laws for their operation.
10. The school's Leadership Team regularly looks at school performance data and aggregated classroom observation data and uses that data to make decisions about school improvement and professional development needs.

Indicators of Effective Practice (Rapid Improvement Leader)

Center on Innovation & Improvement

Effective Practices and Indicators for Principals in Rapid Improvement, Turnaround, and Transformational Situations

From *School Turnarounds: Leader Actions and Results*
See this document for explication and underlying research.
Downloadable from: www.centerii.org

I. Initial Analysis and Problem-Solving

Effective Practice: The Rapid Improvement Leader takes time early in the process to gain a thorough understanding of the school's operations and develop a plan of action.

Indicators of Effective Practice

1. Rapid Improvement Leader personally analyzes data about the organization's performance to identify high-priority problems that can be fixed quickly.
2. Rapid Improvement Leader makes an action plan so that everyone involved knows specifically what they need to do differently.

II. Driving for Results

Effective Practice: The Rapid Improvement Leader relentlessly pursues significantly improved results in student learning and related goals.

Indicators of Effective Practice

1. Rapid Improvement Leader first concentrates on a very limited number of changes to achieve early, visible wins for the school.
2. Rapid Improvement Leader makes changes that deviate from organization's norms and rules if necessary to gain visible wins.
3. Rapid Improvement Leader implements an action plan in which change is mandatory for all staff, not optional.
4. Rapid Improvement Leader replaces or redeploys some staff as necessary based on careful examination of skills and readiness for change.
5. Rapid Improvement Leader quickly discards tactics that don't work and spends more resources and time on tactics that work.
6. Rapid Improvement Leader reports progress but keeps school's focus on high goals.

III. Influencing Inside and Outside the School

Effective Practice: The Rapid Improvement Leader engages, motivates, and enlists the contribution of people inside the school and in the community to achieve school goals.

Indicators of Effective Practice

1. Rapid Improvement Leader motivates others inside and outside the school to contribute to success.
2. Rapid Improvement Leader uses various tactics to help staff empathize with those they serve and be motivated for change.
3. Rapid Improvement Leader works hard to gain the support of trusted influencers among staff and community.
4. Rapid Improvement Leader silences critics with speedy success on "quick win" objectives.

IV. Measuring, Reporting, Improving

Effective Practice: The Rapid Improvement Leader creates metrics to measure, report, and constructively review progress on all aspects of the school's operations and its results (student learning).

Indicators of Effective Practice

1. Rapid Improvement Leader sets up systems to measure and report interim results often.
2. Rapid Improvement Leader shares results in open-air meetings to hold all staff accountable for results and to focus on solving problems.

Eight Elements of High School Improvement: A Mapping Framework

National High School Center

Research on comprehensive school reform suggests that improvement strategies have the best opportunity for success and sustainability when they take into account the broad array of elements that make up the system being improved. Yet, many current high school improvement initiatives are focused only on specific priority topics (e.g., dropout prevention), specific intervention strategies (e.g., advisories, small schools), or program initiatives (e.g., Check and Connect). Although such approaches can have an important impact, their reach is too frequently limited to a subset of systemic reform elements. Implementing such initiatives may lead to success in addressing specific needs, but the probability of widespread improvement is small when initiatives are implemented in isolation from the broader education systems within which they operate.

The National High School Center's goal is to encourage researchers, policymakers, and practitioners at all levels to engage in comprehensive, systemic efforts to maximize attainment for all high school students, with a focus on those students who have been historically underserved. To this end, we have developed a framework that consists of eight core elements and provides a lens for mapping school, district, and state high school improvement efforts. The exercise of mapping should inform strategic planning and implementation efforts by illuminating the connections among elements, revealing strengths and gaps in current state and district policies, and highlighting the stakeholders who should be aware of and involved in future improvement efforts.

This document offers descriptions of the eight elements of high school improvement:

Rigorous Curriculum and Instruction	Stakeholder Engagement
Assessment and Accountability	Leadership and Governance
Teacher Quality and Professional Development	Organization and Structure
Student and Family Supports	Resources for Sustainability

Four points are important to note. **First**, the particular combination or separation of the elements is less significant than an understanding that these elements, which are often treated as discrete, actually are inter-related parts of a single system. Each element has an impact on the others, so understanding their interconnectivity is a critical task. **Second**, a major challenge of using this framework is the risk of overwhelming those involved in the work. Every high school improvement initiative does not need to have some activity in each of the elements at every moment. Rather, mapping the implications of an improvement initiative among all affected elements at the outset will lead to more strategic decisions initially and over time. **Third**, every high school and related high school improvement initiative is situated in a unique geographic, cultural, demographic, political, and societal context, which influences the school's vision, mission, structure, culture, and outcomes. Any efforts at high school improvement must take into account these particular school- and system-level contexts. These considerations affect each element and must be explicitly addressed when improvement strategies are devised. **Fourth**, if scalable and sustainable improvement is the ultimate goal, it is likely that the implementation of improvement efforts will require organizational change. No strategy can be complete without attention to the challenges of leading change within the respective organizational cultures.

Eight Elements of High School Improvement

The eight systemic reform elements that make up the National High School Center Mapping Framework are listed below with their respective characteristics of effectiveness:

1. **Rigorous Curriculum and Instruction:** Everyone in the system is responsible for ensuring that all students have access to rigorous content and instruction that
   - align to local, state, and national standards that look toward the depth of knowledge, skills, and abilities needed for students to thrive in emerging economic, citizenship, and community contexts;
   - incorporate multiple research-based instructional strategies, such as scaffolding, differentiated instruction, and double dosing, for all students, including those with special instructional needs;

- address both academic and workplace literacy skills across all content areas and provide students with knowledge of a variety of career pathways;
- adapt easily to a variety of school organizational structures;
- are organized around student instructional needs and align with instruction in other content areas to support thematic and project-based learning, tiered instruction, etc.;
- interface with the existing school curriculum and quality of instruction;
- align vertically with prerequisite content, cognitive skills, curricula, and follow-up coursework;
- incorporate new modalities for learning and information sharing, including technology and universal design for learning;
- include academic supports such as tutoring, co-curricular activities, and extended learning opportunities, such as summer bridge programs, after-school and supplemental educational services, and Saturday academies;
- incorporate cognitive skills development, including note taking, outlining, content summarizing and synthesis, study skills, and test-taking skills; and
- involve continuous progress monitoring/formative assessment and the differentiation of teaching to meet multiple learners' needs.

2. **Assessment and Accountability:** Balanced assessment and accountability systems cover a broad range of formal and informal assessment policies and practices aligned across multiple levels that
   - include formative assessments embedded in instruction;
   - may include school-based portfolios or projects, interim or benchmark exams (which often are implemented at the district level) as well as end-of-course exams, state standards-based assessments, and high-stakes competency or exit exams;
   - provide timely and effective feedback and access to data so that teachers, students, and parents can capture and evaluate student knowledge and skills, plan for future educational programs, and adapt instruction to better meet student needs;
   - encourage and support continuous progress monitoring through both formal and informal assessments;
   - give teachers and students access to college and work readiness assessments in order to best plan high school courses of study;
   - support the early identification of students with special needs and those at risk of failure so that placement and tiered interventions appropriately meet student needs;
   - collect and report longitudinal data to measure short- and long-term student growth for student-, teacher-, and/or program-based impact evaluations, including new interventions and initiatives; and
   - can include both internal and external accountability provisions, including teacher and program performance measures, rewards, and consequences (depending on local and state contexts).
3. **Teacher Quality and Professional Development:** Teacher quality and professional development systems recognize a teacher's need for deep content and pedagogical knowledge and include a broad set of recruitment, preparation, induction, professional growth, and retention policies and practices that
   - include accreditation of teacher education programs, teacher certification and licensure standards and procedures, professional development requirements and opportunities, compensation systems, and local norms and expectations;
   - are based on standards for staff development and adult learning and pass quality reviews;
   - promote knowledge of adolescent development, varied and effective pedagogy for high school students, and the ability to motivate students and to work with diverse student needs effectively and empathetically;

- increase the abilities of and opportunities for teachers to work together to improve classroom practice and help all students connect information across disciplines and programs, such as Title I, special education, and services for English language learners;
- provide teachers with skills in assessing students and adjusting instruction accordingly;
- are embedded at the school and classroom levels and are connected and offered throughout the school year;
- help teachers develop and build on their classroom and leadership skills and abilities over time and, preferably, in collaboration with other teachers and instructional leaders; and
- promote effective classroom management skills.

4. **Student and Family Supports:** All high school students need guidance and supports that address the whole child, including physical and socio-emotional needs, through positive conditions for learning that
   - incorporate formal and informal guidance programs, including peer and professional counseling and mentoring;
   - include attendance and behavior monitoring and support systems, such as Positive Behavior Intervention and Supports (PBIS);
   - support wrap-around and English-language services that extend beyond the classroom;
   - foster a positive school climate, including safe schools and respectful environments (e.g., anti-bullying);
   - cultivate student voice and leadership in the classroom, school, co-curricular activities, and community;
   - promote health and physical education and co-curricular activities;
   - support students as they transition into and out of high school;
   - provide family-focused services and outreach that engage parents and family members in programs and services; and
   - respect and honor the strengths and resources of the student's family and community.
5. **Stakeholder Engagement:** High schools exist in unique social, political, and cultural contexts, and high school improvement efforts should incorporate stakeholder engagement strategies that
   - engage the interests, needs, skills, and resources of its multiple stakeholders, such as school staffs, students, parents and family members, guardians, community organizations and members, and business partners;
   - foster relationships among high schools, middle-level and elementary schools, and postsecondary education institutions (e.g., dual enrollment agreements), the workforce, families, and communities;
   - ensure that all appropriate stakeholders are at the table during critical planning and decision-making activities;
   - incorporate multiple communications strategies that are culturally and linguistically appropriate and support two-way communications;
   - acknowledge and draw on the strengths of the various stakeholder groups;
   - are designed with contingencies of stakeholders in mind; and
   - incorporate technologies to more creatively and effectively support stakeholder engagement.
6. **Leadership and Governance:** Promoting and supporting high-quality instructional and organizational leadership at the building and district levels require exercising leadership and approaches to governance that
   - provide principals with adequate knowledge, time, and interpersonal skills to work with teachers as they define curricular and instructional goals and develop instructional strategies;
   - promote distributed leadership, encouraging multiple roles for teacher leaders and tackling organizational change where necessary;

- incorporate alternative structures to address management, discipline, and other functions of running high schools traditionally performed by principals;
- shift the focus of state and local policymakers and education agency staffs to support comprehensive high school improvement centered on strengthening the instructional core;
- enact enabling policies and codify a vision, a mission, and/or strategic plans for scale-up and sustainability;
- develop strategies and skills to lead and support required organizational change; and
- clarify decision-making authority at all levels and recognize the expectations, requirements, compensation, and recognition of faculty and staff.

7. **Organization and Structure:** Many high school improvement initiatives are enhanced by or may necessitate changes from the organization and structure of traditional, comprehensive high schools toward operational structures that
   - support effective teaching and learning and personalization through physical and operational changes, such as the creation of small schools and smaller learning communities, freshman academies, career academies, career-tech high schools, and other alternative structures;
   - incorporate alternative time/scheduling approaches, such as block scheduling, year-round schooling, and double dosing, especially in core academic courses;
   - provide increased opportunities to learn, such as virtual courses, dual enrollment opportunities, and work-based internships;
   - include students with special needs in the general curriculum with access to rigorous content through co-teaching, tiered intervention structures, and adaptive supports;
   - support teacher organizational changes beyond traditional departmental structures, such as common planning periods, professional learning communities, and co-teaching; and
   - support the difficult process of culture changes as roles, responsibilities, relationships, and patterns of engagement change.
8. **Resources for Sustainability:** Critical to any high school improvement initiatives are the identification and commitment of adequate fiscal and other resources that
   - grow both the physical and human capital within the system for implementation and sustainability of high school reforms;
   - continuously upgrade facilities, tools, and materials to keep pace with the changing economy, technology, and citizenship expectations;
   - adequately staff the initiatives and acknowledge the need for workload equalization and/or reduction;
   - provide appropriate time and necessary fiscal support for initiatives to be implemented and take hold;
   - continuously develop teacher knowledge and skills to incorporate these changes into their instruction;
   - move effective practices to full implementation and scale-up; and
   - define priorities and allocate needed resources to sustain them over time.

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