IDENTIFY NEW RESEARCH-BASED SOLUTIONS TO INITIATE

Possible Actions at the School-and/or System-level
One important assumption is that each school and school system is unique. Therefore, needs vary from system to system and school to school. It is clear that there is no "one-size-fits-all" starting point for improvement or reform. Change in a school system occurs one school at a time. Educators in schools are thoughtful and purposeful in their approach to change and typically begin a major change in one of the major domains of Curriculum, Instruction, Assessment, and Organizational Processes. But in schools and in systems, there is generally the need to make some changes in several domains at once.

In planning the most effective action for improvement, planners must attend to the interactions of specific actions. That is, keeping the big picture in sight, but also focusing on the details to reduce the likelihood of unintended consequences. Effective plans will attempt to anticipate the consequences of any changes on the rest of the system and to understand as well as possible the interconnectedness of the total system.

The following actions are research-based and have the potential to bring about positive change, but they are by no means a complete listing of all effective actions. Planning action may also require reviewing additional and pertinent research as well as visits or interviews with other educators who have implemented the same or similar actions.

[Note that in the listing of actions some are identified by [HI] to indicate High Impact improvement strategies that have been shown to have the most dramatic impact on student achievement. Source is mcrel.org--Guiding School Change through Inquiry: A Systemic Reform Support System.]

CURRICULUM & EXPECTATIONS

Possible Actions

____ Provide teachers with a well-articulated curriculum aligned with assessments and ensure that the curriculum is actually taught [HI]

____ Organize the curriculum to respect students’ developmental levels and prior knowledge and learning experiences.
   This is a three-part strategy: a) well-articulated, b) aligned to assessments, and c) school leaders monitor the extent to which it is actually covered. Align the “written” or formal, “teacher-taught,” and “teacher-assessed” curriculum with the TN Frameworks and standardized test objectives. When employed together, they can have profound impact on student achievement.

____ Identify clear and challenging, but attainable standards for all student groups.
   Effective Curriculum Mapping in its various forms can result in a well-aligned, prioritized, and paced curriculum guide which is carefully articulated across all grade levels. The curriculum learning expectations have been revised to avoid redundancy and gaps in student learning.

____ Identify integrated learning expectations coordinated across various disciplines.
   Integration using connecting ideas or themes is almost universally advocated as a means to accommodate curriculum content to the available instructional time.
Ensure that curriculum and extracurricular offerings provide all students multiple opportunities to acquire and demonstrate priority knowledge and skills.

Incorporate higher level thinking and reasoning skills, learning to learn skills, Habits of Mind, workplace skills, and multicultural perspectives into the curriculum.

Conduct a materials and resources audit to identify existing curriculum resources. Enhance curriculum as needed and as resources permit to more adequately cover learning expectations. An important implication is that aligning curriculum with standards can require dramatic changes in curriculum and textbooks. One consequence of this action is that many districts cannot immediately afford to purchase needed resources. One approach is to identify the standards that are already addressed in the current curriculum and fill in gaps over time by enhancing the curriculum as human and financial resources permit (see Laboratory Network Project, 2000).

Ensure that all teachers understand, support, and use the curriculum consistently. Keep the focus on learning and make the curriculum expectations a major improvement vehicle. Experienced school leaders suggest that getting the curriculum “right” should be an essential improvement initiative. This means that a system or school should direct significant effort to this work.
INSTRUCTION

Possible Actions

____ Ensure that all administrators, teachers, paraprofessionals, and other support staff clearly understand the responsibilities of their jobs, the professional standards related to those responsibilities, and the current district and school improvement efforts and goals.

For teachers, the TN Framework for Teacher Evaluation and Professional Growth is one major process for ensuring that teachers have a thorough understanding of their responsibilities. Using this process as it is intended and to its full potential should be a goal for many school systems and schools. It provides many excellent opportunities for professional learning in the areas that can make a difference for student learning. Mentor programs are highly successful in helping new teachers and others understand their important expectations. The other groups have listing of job responsibilities and similar evaluation processes.

____ Recruit and retain highly-qualified administrators, teachers, and paraprofessionals.

It is essential that every student has the highest qualified, most committed teachers as can be found. The critical nature of the teacher-student relationship and its significant impact on student learning is verified by numerous research studies. Recruitment strategies are specifically addressed. This is again where system- and school-wide mentor programs that supplement the more informal coaching and mentoring are especially effective.

The research is clear and extremely positive—when novice teachers are mentored in effective ways by mentors who are specially selected and trained, they are more effective instructionally earlier in their careers than typically happens when mentoring and mentor programs do not exist. Numerous other important benefits also occur to both novice and experienced teachers such as increased retention rates of new teachers, increased satisfaction with the profession, increased effectiveness of teaching strategies, and renewed commitment to the profession for mentors. Many districts are also seeing the positive effects of administrator mentoring as well.

[Tennessee SDE has adopted a model for teacher mentoring, Raising the Bar for Teacher Performance and Student Achievement through Mentoring, and local trainers are available in most systems beginning 2003-04 SY.]

____ Optimize teachers’ use of instructional time [HI]

One of the most enduring school-level factors in the research is the effective use of time. Four basic types of time are identified: 1) allocated time, instructional time, engaged time, and academic learning time (Denham & Lieberman, 1980). Allocated time is that time in the school day specifically set aside for instruction, as opposed to non-instructional time like recess and lunch. Instructional time is the in-class time teachers spend on task, as opposed to management-oriented activities, like taking roll. Engaged time is that portion of time during which student are actually paying attention to the content being presented - often referred to as "time on task." Academic learning time is the proportion of engaged time during which students are successfully learning or successful at the task in which is at the appropriate level of challenge.

Researchers assert that each category of time shows a stronger correlation with student achievement than the previous one. That is, academic learning time has a stronger relationship with achievement than engaged time, and so on. At the school level, the implications of this research for school leaders is that they must: 1. maximize the amount of
time allocated for instruction, 2. minimize the amount of instructional time lost to absenteeism and tardiness, and 3. minimize the amount of instructional time lost to unnecessary extracurricular activities. An additional implication for teachers is that they must have effective classroom management strategies that maximize their instructional time, minimize disruptions, and keep students on-task.

One caution related to time, a important note by researchers in a study titled Extended School Day/Year Programs: A Research Synthesis, little research evidence exists to suggest that increasing the school day or school year will increase student achievement. Rather, "the crucial issue seems to be how the time is used, with quality of instruction being the key."

Allocate instructional time effectively for appropriate instructional purposes for all student groups.

Ensure that instructional time is used effectively and appropriately for all student groups.

Consider block scheduling which can allow teachers to better optimize their instructional time, depending on how it is implemented and how much support teachers are given in learning how to provide better instruction during longer class periods.

Make sure students as well as teachers are focused on standards or learning expectations. Many research studies find that when students are clear in advance about what they were learning, their achievement was higher than when they were unclear. This finding recommends that teachers explicitly make the connection between learning expectations or objectives and every lesson they teach. Students should also be clear about what they are supposed to learn and their progress on learning.

Ensure that teachers incorporate research-based strategies shown to be highly effective with the students they teach. Promote the use of teaching strategies that actively and appropriately engage students in learning activities, making contributions, asking questions, participating in discussions, and using technology to learn.

Increase teachers’ understanding, support for, and use of advocated, research-based instructional practice.

Engage teachers in developing and following a common instructional design that is highly effective and can be adapted to meet the needs of individuals and groups. Require teachers to identify curriculum standards or learning expectations in unit and lesson plans.

Ensure that the quality of individual planning, team planning, and decision making is consistent and high quality across subjects, grade levels, teachers, and student groups. In high-performing schools, principals and teachers collaborate to rearrange class schedules so teachers could engage in both horizontal (same grade level) and vertical (different grade levels) planning. The entire staff also meets together twice a week to share experiences and strategies that positively affected students. School leaders have to balance the use of these meetings, making them structured enough to be productive, yet flexible enough to encourage open communication among teachers.
Communicate the expectation to teachers that they be committed to horizontal and vertical team planning participating and contributing willingly and eagerly.

Provide assistance needed to increase the effectiveness of teams in collaborating and coordinating with other educators who teach their students.

Ensure that teachers exhibit in-depth knowledge of content, pedagogy, and students.

To promote learning at optimal levels, it is critical that teachers know their students’ individual and collective assets and interests as well as needs, their school community and the resources within. Linking the learning in meaningful and authentic ways contributes to students’ perceiving it as relevant.

Guarantee that the learning environment and teacher to student interactions are respectful, appropriate, and reflect high expectations for learning.

Ensure that classroom procedures, physical space, student behavior and contributions are supportive of a challenging and dynamic environment.

Ensure high-quality classroom learning environments that are consistent across subjects, grade levels, teachers, and student groups.

Ensure that teachers act in ways to ensure student success by providing timely, substantive feedback, differentiated instruction, and persistently searching for approaches to meet student needs.

Ensure that high-quality instruction is consistently implemented across subjects, grade levels, teachers, and student groups.

Provide training, assistance, and plans to substitute teachers to ensure positive learning experiences for students.

Encourage teachers’ enthusiasm and engagement in sharing results of improved teaching techniques with colleagues.
ASSESSMENT

Possible Actions

_____ Determine the extent to which assessments are aligned with curriculum, instruction practice and standardized assessments, then develop steps to ensure tight alignment.

_____ Establish and use common assessments at designated points to monitor achievement goals and reliably determine student progress on curriculum learning expectations [H1].

Research shows that articulating academic goals at the school level and monitoring student progress toward those goals were associated with student achievement gains. Well-designed and aligned classroom assessments are a major way to assess students’ progress and the effectiveness of the instruction. These gains result when schools are systematic in collecting data on student achievement and using those data to guide instruction. This also includes comparing the results of student scores on standardized or state-level assessments with those at the classroom level.

_____ Ensure that assessment types, conditions, and methodologies are effective in promoting student performance on learning expectations for all student groups.

_____ Pace curriculum expectations to ensure that important content is covered prior to high-stakes tests.

Many districts have found it helpful to study the alignment between their standards, curriculum guides, and district or state assessments. Students cannot be expected to know content they have not had an opportunity to learn. In the high-performing schools principals and teachers pace the curriculum to ensure that children were being taught the knowledge, concepts, and skills before testing occurs.

_____ Ensure that the quality of assessment methodology is consistent across subjects, grade levels, teachers, and student groups.

_____ Use assessment results in ways that help teachers change their instructional practice.

_____ Disaggregate student performance data to determine if teachers need to alter instruction methods to better serve certain student groups.

A key of NCLB requires the disaggregation of student performance data to determine if all student groups are performing at proficient levels. This emphasis on the performance of all students often means that teachers must alter their current instructional methods to ensure that all students are learning at high levels. For example, teachers may need to learn how students’ cultural differences can translate into different learning styles and the need for different forms of instruction. But teachers must do more than understand or be tolerant of such differences; they must modify their instruction to better meet the needs of diverse students.

_____ Develop a range of assessments from traditional (requiring students to primarily recall information) to alternative (requiring the use of higher level thinking skills and application of knowledge).
___ Arrange for time and opportunities for teachers to share testing strategies and increase teachers’ understanding, support, and use of advocated assessment practice.

*Teachers must use the kinds of assessments that best evaluate the degree to which students have learned the knowledge and skills addressed by standards. Multiple-choice, true-false, and other forced-choice tests can be useful tools to assess students’ knowledge of particular facts. But they are probably not the best method for assessing students’ understanding of complex concepts. The fact is that different forms of assessment are appropriate for different types of knowledge. Teachers may need to revise their classroom tests or develop new activities for judging students’ progress on standards. Forced-choice tests should not be discarded, but rather supplemented with other forms of assessment, such as essays, performance tasks, student portfolios, and self-assessments.*

___ Use classroom assessments to improve students’ test-taking skills.

*Classroom assessments can be valuable tools for assessing students’ readiness for large-scale assessments and preparing them to take these tests. Students’ test scores can dramatically improve after teachers focused on familiarizing students with the types of items they were likely to encounter on the tests. For example, a high-poverty school dramatically increased students’ scores after educators realized that large-scale assessments are a different form of information recall than their students typically were encountering. Teachers’ tests should include the same question formats as those on the state assessment. This type of practice also helped alleviated their test anxiety, allowing them to better demonstrate their knowledge and skills.*

___ Encourage teachers to give classroom assessments, or portions of their assessments, in the same format as large-scale assessments.

*The suggestion goes beyond showing students how to fill in bubbles or guess more accurately. It means using day-to-day assessments can help students practice the kind of answer formats found on the statewide assessment. As one teacher put it, they are now "teaching students to communicate in writing about what they are reading. We never assume that they know. They must prove it to us every day" (Bingham, 1998, p. 6B).*

___ Ensure that performance criteria and standards clear, communicated to students, and appropriate for individual students and group needs.

___ Ensure that performances and products are evaluated and interpreted consistently by teachers so that important conclusions may be drawn.

___ Structure assessments for student success by incorporating additional opportunities for students to improve results.

___ Ensure that teachers monitor student progress on a regular and consistent basis to provide timely, substantive, and varied feedback regarding needed improvements.

___ Use assessment results to gear instruction to student needs and to provide timely remediation, enrichment, acceleration, tutoring, etc.

___ Communicate assessment results to students and parenting adults in understandable form.

___ Report assessment results in longitudinal records or portfolios that are accessible to teachers.

___ Ensure that students are given opportunities to reflect on their learning progress and their abilities as learners through a range of formal and informal assessments.
ORGANIZATIONAL PROCESSES

Beliefs, Mission, & High Expectations

Possible Actions

____ Communicate high academic achievement is the primary goal [HI].

Researchers call this school-level variable "pressure to achieve" or "high expectations for student achievement. It means to communicate a strong message placing a clear focus on mastery of basic subjects, establishing high performance expectations for all students, and carefully monitoring student progress.

Climate & Culture

____ Maintain an orderly environment [HI].

School climate is one of the original five correlates of school effectiveness. This factor is the extent to which a school creates an atmosphere that students perceive as orderly and supportive. A positive school climate is commonly associated with these characteristics: clearly articulated and enforced rules and procedures, an orderly atmosphere, positive interactions among staff and students, and implicit norms of civility are recognized and enforced.

**HQ Teacher Note--This also influences teachers’ sense of satisfaction with teaching and therefore, their retention at the school and in the profession. Not being allowed to focus on teaching and learning, but rather than on constant discipline problems is identified as a reason teachers give for leaving the profession.

____ Maintain a cooperative environment [HI].

Many researchers identify cooperation as a school factor that impacts student achievement. In general, cooperation can be described as the extent to which staff members in a school support one another by sharing resources, sharing ideas, and sharing solutions to common problems. Some indicators that signal cooperation at the school level are: the frequency and quality of staff meetings, frequency and quality of informal contacts between staff, the extent to which staff members agree on school policies, the extent to which staff cooperation is an explicit goal, the extent to which consensus is sought for critical decisions.

**HQ Teacher Note--This also influences teachers’ sense of satisfaction with teaching and therefore, their retention at the school and in the profession. Lack of administrative support is identified as a reason teachers give for leaving the profession.

____ Ensure a climate that is professional, respectful, and supportive of risk-taking.

Many school leaders say it is important for leaders to create a climate of trust in the school. This can be partly accomplished by allowing staff members to express their perspectives, even if they conflict with organizational direction. Another key is providing a safe environment in which staff members openly and respectfully resolve conflict. School leaders help create this kind of climate by modeling these behaviors and by recognizing that they do not diminish their stature as leaders when they open up their organization to diverse perspectives.

____ Create teaching teams to foster professional growth and maximize the value of professional development activities.

Teachers, all too often, spend their days working behind closed doors, isolated from one another’s professional knowledge. To reduce isolation and enhance teachers’ ability to learn and grow together professionally, many schools have turned everyday activities, such as
classroom planning and teaching, into forums for professional development. Teams of teachers now plan, teach, and evaluate students together. This approach encourages them to exchange ideas, to push each other toward excellence, and to reinforce what they’ve learned through professional development activities in their efforts to positively impact student achievement. To encourage collaboration among teachers, some schools have adopted a 20-80 rule for their professional development efforts - 20 percent of their activities consist of presentations or trainer-led activities, while 80 percent consist of collegial problem solving.

___ Create a clear expectation of continuous learning and improvement.

Creating a community in which continuous learning and improvement--on the part of teachers, administrators, and students--is the norm rather than the exception often represents a departure from the past. Schools that have successfully created so-called learning communities have done so through a variety of strategies. Some schools have signaled this shift in culture through a succinct, clear, ever-present mission statement and through annual events during which important accomplishments gained through professional development are celebrated.

___ Use team-teaching strategies to help transform the school culture.

Many schools and systems are exploring ways to energize teaching and learning. Team-teaching is dominant in a school with teachers collaborating to improve student achievement, those who are unmotivated or reluctant to change their practices cannot hide. To avoid critical feedback from colleagues, ineffective or apathetic teachers often choose to seek employment elsewhere.

___ Use test results as an impetus for improvement efforts, keeping the focus on continuous improvement, not past failures.

Teachers should be encouraged to see the tests, flawed though they may be in some cases, as a means for helping students. School leaders need to address the discouragement among teachers, students, and parents that can result from poor test results and acknowledge negative attitudes that teachers may have. The advice is to get the concerns out in the open, but not to linger too long on misgivings about tests.

Test scores can help focus and clarify school improvement goals and create a sense of urgency about improving curricula and instruction. In this way, test results can be an impetus for creating better staff development and teacher study groups, which can help bring about a more positive school culture and foster motivation for improvement. The key is to discover solutions together and keep the focus on the future, not the past.
Leadership

Possible Actions

___ Involve staff in key decisions and establish clear communication and leadership roles [HI].

For many research studies, effective school leadership was defined as the extent to which the school has strong administrative leadership relative to the goal of academic achievement. The factors associated with this sort of effective leadership are: well-articulated leadership roles, the school leader as an information provider, and the school leader as a facilitator of group decision making. Leadership is defined in the school effectiveness literature rather broadly to encompass many important functions such as establishing policies relative to the use of time, establishing policies relative to curriculum/test congruence, etc.

**HQ Teacher Note--This also influences teachers’ sense of satisfaction with teaching and therefore, their retention at the school and in the profession. Lack of decision making opportunities is identified as a reason teachers give for leaving the profession.**

___ Examine teachers’ unit and lesson plans to see if curriculum learning expectations or standards are being taught in the classroom.

A number of studies show that curriculum guides often do not translate into classroom practice. Because of time constraints and personal preferences, teachers often skip over content and expectations designated in curriculum guides. Unit and lesson plans can provide some information about when curriculum learning expectations are addressed.

___ Instructional leaders find more time to devote to leadership activities including observing in classrooms to see how well the curriculum is being taught.

School leaders can send the message that they are focused on learning by spending more time as instructional leaders. Principals say that regularly observing classroom instruction is key to ensuring that all teachers are moving toward quality instruction. It’s important to encourage teachers, to give feedback, to positively reinforce teachers who are effectively implementing lessons and assessing students’ progress on individual standards. The principal of a high-performing school reported that she spent 40 percent of her time in teacher’s classrooms observing teachers and helping them improve their instruction.

___ Develop broad-based leadership across the school community.

It is critical to successful improvement that leadership is broad-based. All too often, improvement initiatives are driven by a single individual or a small group of people. Such changes are likely to fail for two primary reasons: lack of staff support and administrative turnover. Thus, it’s important to embrace an expanded view of leadership that includes people at all levels and areas of the system. In terms of staff development, this could mean, for example, tapping experienced teachers to serve as mentors for novice teachers.

___ Focus staff energy on helping students.

In effective schools, leaders found ways to redirect time and energy spent dealing with conflicts between adults in the school toward the common goal of serving children. School leaders can help create such a staff in part by encouraging everyone to put aside their differences, modeling a willingness to resolve differences quickly and fairly, and keeping the focus on helping students. The consistent and constant message is “It’s about the kids.”
Use skilled veteran teachers as mentors and instructional leaders.

**HQ Teacher Note—Research supports mentor programs as a significant influence in retaining teachers.** Having the support of trained mentors in a schoolwide mentoring and induction process is identified as a reason teachers stay at the school and in the profession. Increasing retention of highly-qualified teachers is significant in sustaining school improvement efforts and in providing effective instruction to all students. TN is making good progress in this area through its TASL, Title II, UTK Mentoring Program.

In addition to mentoring, successful school leaders find ways to extend instructional leadership to veteran teachers. They can serve as peer mentors or academic coaches to less experienced teachers and can greatly improve the instructional methods of everyone involved. In some settings, these mentors or coaches are freed from the typical daily or weekly schedule or even for an entire year to assist other teachers.
**Possible Actions**

___ Target all professional development activities toward enhancing student learning. Examine student assessment data to identify priority areas for professional development.  

_A key feature of all national professional development award winning schools is that their professional development efforts have the explicit goal of improving student learning, usually by finding ways to improve classroom practices._

___ Ensure that learning from professional development activities are readily applied in classrooms. Professional development activities need to be integrated into daily activities or be quickly applied in classrooms. In one effective model, teachers’ professional development experiences included formal training as well as on-the-job coaching from outside consultants to help them understand and use specific instructional programs to raise students’ literacy scores.

___ Develop ongoing professional development related to creating effective practices. Teachers often need a considerable amount of guidance in learning how to implement recommended practices (e.g., how to teach standards, how to assess students’ progress toward meeting them, how to grade students’ progress in meeting individual standards, how to create useful performance tasks). Helping teachers develop these crucial skills requires more than a one-day in-service; it requires ongoing support and assistance.

___ Provide teachers with training on using different instructional strategies to teach different types of knowledge addressed by curriculum expectations or standards. Researchers are finding that different curriculum expectations call for students to acquire different types of knowledge. Some standards identify skills (sometimes called procedural knowledge) that students will learn, such as reading a map, performing long division, or setting up an experiment. Other standards identify facts, concepts, or generalizations (declarative knowledge) that students will learn, such as the concept of a geographic region, the concept of a numerator, or the characteristics of an amoeba. Teaching different types of knowledge requires different instructional strategies. The best teachers are those who expand their repertoire of instructional practices to suit the particular kinds of knowledge addressed by specific standards.

___ Provide teachers with the training and resources they need to design appropriate classroom assessments. Helping teachers assume the primary responsibility for measuring their students’ progress makes sense because they are the closest to students and know them best. But it is imperative that teachers know how to design and administer effective in-class assessments. This is true not only because educators need to accurately gauge what students are learning, but also because, experts tell us that the assessment drives instruction. The major caution is that poorly designed assessments can drive teaching and learning in the wrong direction.

___ Provide teachers with necessary training to help all groups of students meet high standards of learning. All student groups must learn and perform at high levels. In light of research indicating that non-minority students are engaged more often in class than are minority students, some teachers need to rethink how they design and manage classroom activities and interactions to engage more students actively and purposefully.
Assist in setting up teacher study groups on a variety of topics related to learning goals for students or work sessions to design effective lessons and units. Many experts rank professional development delivered through teacher study groups as the most effective, but other structures like multi-day workshops and longer-term arrangements with outside professionals may also be required.

Use student assessment data to evaluate the impact of professional development efforts. The end result of professional development should be increased student performance. It follows that student performance data should be used to measure whether changes in teaching practice have improved student achievement. Leaders of schools in which teachers have significantly improved their instructional practices credit the use of assessment results and other forms of data to guide professional development. Test scores and other data can guide the selection of professional development activities by pointing to areas in need of improvement. It’s also important to examine various forms of student performance data, including disaggregated data, to determine whether professional development efforts are having a positive effect on all student groups.

Supplement quantitative data with qualitative sources of feedback about students' performance to evaluate the impact of professional development efforts. In addition to student performance data, it’s important to gather qualitative data, including feedback from faculty meetings and informal conversations with teachers. Examining assessment data can lead to important insights about areas for improvement, but this information may not give a complete picture.

Clearly communicate the expectation that all teachers and staff members are expected to actively participate in professional development activities—and monitor participation. Leadership is crucial in creating effective professional development programs that are linked to ongoing, improved student learning. School leaders foster a culture of inquiry by encouraging debate and discussion among staff and rewarding (often through even more professional development opportunities) those who actively participate. It is important for principals to emphasize that professional development is "expected of all staff." Many leaders assign all staff members to serve on school improvement teams that identified issues, conducted research, and made recommendations for improvement.

Actively advocate for long-term, sustained professional development to decision makers and others outside the school. Having reliable evaluation and student performance data can build a convincing case. Because ongoing professional development often requires rethinking organizational structures, soliciting support from the school board to create opportunities for teachers to work together is important. Positive results in student performance can make a strong case for effective programs.
Governance

Possible Actions

___ Involve teachers in every phase of system and school improvement and reform activities.

Most teachers, especially veteran teachers, have seen education reform movements come and go. In light of the enormous effort required to implement major initiatives, it’s especially important for teachers to understand that these initiatives are not going away, and, more important, using the advocated practices will improve student learning. One way to diffuse resistance to change efforts is to provide teachers with the training they need to truly be successful. For example, teachers will most likely need to learn how to move from a traditional grading system to one that is intrinsically focused on standards. This sort of professional development can help set a clear expectation that standards should affect what happens in classrooms and that teachers have a primary role to play in helping students achieve standards.

___ Evaluate, interpret, and provide guidance in addressing emerging government regulations.

Communication

Possible Actions

___ Use web resources, newsletters, bulletin boards, and school events to keep stakeholders informed about improvement efforts.

People want to be “in the know” about important matters. For example, it is important for parents and other community members in addition to the educators to know the benefits of professional development. Some may initially view professional development efforts as simply taking time away from more important things, such as instruction. It is important to keep everyone not only informed about professional development efforts, but also supportive of them.

___ Use well-guided, regular meetings to open communication lines and create and maintain a common focus among educators.

Leaders of successful systems and schools say that creating a positive environment in which educators work together to meet a common challenge is essential to improving student performance. This often entails enhancing communication between administrators and teachers. The use of regular meetings helps keep the focus on improvement targets. Educators notice this clear focus and become more consistent and unified in their efforts to boost student achievement.

In high-performing schools, principals and teachers collaborate to rearrange class schedules so teachers could engage in both horizontal (same grade level) and vertical (different grade levels) planning. The entire staff also meet together twice a week to share experiences and strategies that positively affected students. School leaders have to balance the use of these meetings, making them structured enough to be productive, yet flexible enough to encourage open communication among teachers. If this type of collaboration works at the school level, it follows that some opportunities or structures should be provided at the district level to encourage and support collaboration across school sites.
External Environment

Possible Actions

Maintain awareness of any important changes in the public's view of the educational process in the school and system (e.g., parents' concerns about quality).

A simple definition for external environment is all those elements outside an organization that have potential to affect all or part of it. Effective leaders need to keep a watchful eye on the bigger picture and emerging trends that might affect their schools and their districts. For example, demographic changes in the community mean different expectations and new challenges for schools. As the children and families in a community change, schools must also change to continue meeting the needs of their community. Leaders must alternate between participating and observing, responding to external pressures and shaping the environment.

Resources & Resource Allocation

Possible Actions

Provide additional learning opportunities for students who do not initially achieve performance expectations or standards.

At the heart of school improvement is the notion that all students are capable of learning at high levels. For this to occur, districts and schools must be willing to provide extra help to students who do not meet standards at identified transition points. Leaders need to be aware of the implications that creating a standards-based system will have on their use of resources. Providing extra help to struggling students often requires reallocating resources to after-school or summer programs or redirecting teachers’ time. Obviously, these programs require a significant level of financial support. But, these investments are generally worthwhile. Many districts have seen dramatic increases in student achievement after committing to high standards for all students, then ensuring that every student has the opportunity to meet those standards.

Reorganize class schedules to create blocks of shared preparation time and to facilitate team teaching.

Leaders in high-performing schools emphasize the importance of giving teams adequate time to work together to plan, evaluate, and improve. Doing this may require rethinking organizational structures. Some schools, for example, have reworked their weekly class schedules to create once-a-week early-release afternoons, giving teachers a chance to convene study groups, plan integrated classes, and take time for other collaborative activities. Having strong support from the district level is critical to these actions in the schools.

Create blocks of instructional time devoted to targeted student needs, such as literacy skills.

In attempting to improve instructional practices, school leaders often have found it necessary to reallocate their use of time. Several successful elementary schools have created large blocks of time, sometimes as much as two hours, to focus on specific content areas. For example, many elementary schools are scheduling two hours every day for reading instruction. This block was considered "sacred" - even if inclement weather shortened the school day, leaders made sure students still received two hours of reading instruction.
Create longer blocks of instructional time.

Some school leaders also have found that traditional class periods are too short to accommodate in-depth, learning for understanding. They have opted for alternatives, such as block scheduling in which students remain in the same classroom for longer periods, typically 90 minutes. Of course, without adequate training, teachers may be resistant to longer class periods or lack the skills to use the extra time productively (e.g., by engaging students in small-group or self-guided learning). As a result, they may turn the 90-minute periods into marathon lectures, which may only serve to enhance students’ doodling skills.

Reallocate resources used for nonacademic programs.

Also, it is important to recognize that implementing changes or new strategies in classrooms often requires an enormous investment of staff time to develop new lesson and unit plans, new assessments, and new reporting systems. To help teachers accomplish these changes, leaders may need to rethink teachers’ schedules and responsibilities. They may also need to examine their nonacademic programs and consider creating larger classes in these areas or moving support staff from nonacademic subjects to core subjects. Another option is to refocus nonacademic programs to cover the core academic knowledge and skills identified by the curriculum.

Find ways to involve all school staff members in instructional activities.

Given the emphasis statewide accountability systems are placing on reading scores, many schools have also found ways to create even better teacher-student ratios during reading blocks. During these times, all the adults in the school - including administrators, physical education, art, music, and library teachers - work with students to improve their reading skills. In this way, they are able to give struggling students much more individualized attention, including one-on-one tutoring.

Facilities

Possible Actions

Redistribute staff to create smaller class sizes.

A number of schools that have successfully met the challenges of external accountability requirements have found ways to redistribute their staff in order to create smaller class sizes—especially in the primary grades. Some high-performing schools are reassigning “pull-out” teachers to classrooms, and thereby reducing the school’s average class size. Many school leaders see smaller class sizes and a major contributor to increases in the number of students testing at proficient levels on the statewide reading and writing assessments.

Technology

Possible Actions

Study the effects of specific technology on student learning and use the findings to improve practice.

The current shift to computer-based, multimedia technology is giving educators a new educational tool that is changing teaching, learning, and curricula. Given that schools are investing millions of dollars into technology, educators must answer questions regarding the use of technology and the effect on student learning and attitude towards learning.
Provide teachers with the training and assistance needed to effectively integrate technology into instruction.

The research is clear--teachers must learn how to use the technology and also how to effectively integrate it into the curriculum, or the hardware, the software, the connection to the Internet, and technology plans are worthless. Thus, it is essential that leaders provide proper training to maximize the impact of their large investment in educational technology. In addition, one of the most difficult aspects of implementing technology in schools is finding and securing the funds for new technologies and associated ongoing expenses.

Purchase data management software to help teachers use student data to guide and improve their classroom practices.

If teachers are overwhelmed with the time-consuming work of recording and reporting students’ scores on assessments, they will have less time to carefully analyze these data and be less likely to identify effective improvement strategies. To reduce the data management burden on teachers, district and school leaders need to consider purchasing electronic student data management systems and budgeting clerical support for data input and management.

Accountability

Possible Actions

Create peer review panels to observe the extent to which teachers are implementing accepted improvement action into their classrooms.

Providing teachers with training and resources for aligning curricula and classroom assessments with learning expectations is critical. But many school leaders also believe that teachers should be given incentives to do so. One way to accomplish this might be to hold teachers accountable for students’ achievement on assessments. However, this approach is fraught with difficulties given the large margin of error inherent in any single measure of performance and the potential of high-stakes tests to encourage teachers to narrow the curriculum.

A more appropriate and fair way to provide teachers with incentives to implement standards might be to judge their efforts in the classroom. Principals usually are responsible for making these judgments, but all too often they base their evaluations on only one or two limited observations of teachers. A preferable approach might be to use peer evaluation, in which teams of teachers spend time observing teachers and offering constructive criticism. Some school leaders who have adopted this approach say that it not only helps teachers under scrutiny to improve their practices, but also helps those teachers conducting the reviews improve their own practices as well.

Adopt a skills-based pay system that rewards teachers who demonstrate specific skills and competencies.

Yet another approach suggested by some experts might be to adopt a skills- or competency-based pay system. Under such a system, teachers are rewarded not for degrees earned and years of experience, but rather for their ability to demonstrate skills that the school or district has identified as important. These competencies might include the ability to design lesson plans and activities related to curriculum standards, to assess students’ progress on specific standards, and to give feedback to students on their progress.
Policies

Possible Actions

____ Redesign report cards to more appropriately reflect students’ progress on learning expectations. School leaders may also need to consider how to report students’ progress on standards to parents. There are a number of ways to give feedback about students’ progress. One option is to continue to assign letter grades, but to supplement these grades with scores that reflect students’ progress toward specific standards addressed in each course. Another approach is to report progress only by the individual standards addressed in each course.

One difficulty in using this sort of reporting format is that many teachers consider nonacademic factors, such as attendance or participation, when assigning overall grades. Thus, before adopting a reporting format, school leaders may need to consider whether grades or scores will continue to be assigned for each of these factors. Or they may need to determine the relative importance of these factors compared to academic standards. Although reporting students’ mastery of specific standards will no doubt raise questions such as these and require significant changes on the part of teachers, the feedback this approach offers to students and parents can be a valuable means for promoting students’ mastery of standards.

____ Establish (in collaboration with students) attendance and tardiness policies that are focused on maximizing attendance and student learning and that are flexible and responsive to individual situations.

____ Establish (in collaboration with students) discipline policies that are publicly known, are clear standards of student conduct based on mutual respect, and have reasonable consequences for infractions.

____ Establish (in collaboration with students) homework policies and practices that are flexible and designed to promote student learning, with firm, but respectful consequences for incomplete work based on individual situations.

____ Establish grading policies that reflect mastery of learning expectations and what the student actually knows and can do (rather than compared to the performance of other students) and also that reflect effort, amount of progress, and level of participation and cooperation a student exhibits.

Any policies (districtwide or adopted by individual schools or school levels) that are counterproductive and result in decreased student achievement and diminished attitude towards learning should be reviewed, revised, and redesigned. Since most policies originate at the district level, it is important for the district leadership to design and formalize studies to assess the impact of specific policies on student achievement.
Possible Actions

_____ Involve parents in setting and enforcing policies [HI]

Parental involvement can be generally described as the extent to which parents are involved in and supportive of the culture and operating procedures of the school. Many researchers have noted that home and school cooperation is an important variable in student achievement. Parent practices are: good written information exchange between school and parents, parental involvement in policy and curricular decisions, and easy access for parents to administrators and teachers.

_____ Involve parents in planning and participating in professional development activities.

Principals may want to schedule both large and small group opportunities for parents to ask questions, air concerns, and discuss implications of any major changes for their children. Bulletin boards, newsletters, and school events are other avenues for keeping stakeholders informed. Some award-winning schools have provided sessions for parents that are similar to the training teachers received. Still others have sought input from parent advisory committees in planning professional development activities.

_____ Encourage parent support by demonstrating tangible ways teachers and staff are working to improve student success.

_____ Provide meaningful ways for parents to aid student learning.

High-performing schools find ways to involve parents in their school improvement efforts. One of the best ways to get parent support is by first improving student achievement. This may seem to go against conventional wisdom, but leaders in high-performing schools say that increased student achievement leads to increased parent involvement. When parents see their children doing better due to the extra efforts of school staff, they tend to become more willing to support the school.

In designing these efforts researchers emphasize the importance of finding ways to involve the parents of all students. All too often, the parents of language minority students, for example, are reluctant to come to school events because of their lack of English fluency. Yet their children may have the most to gain from a stronger connection between the school and their parents. Thus, schools need to find ways to reach out to these parents, often in creative ways, such as sponsoring community events of interest to parents or bringing other services, such as health care, counseling, and other social services to their campuses.
REFERENCES & RESOURCES

Reference: These suggested actions came from interviews with school leaders, research, and McREL’s experiences in the field. Another resource used was Hope for Urban Education: A Study of Nine High-Performing, High-Poverty, Urban Elementary Schools (Charles A. Dana Center, 1999), a report of the findings of a U.S. Department of Education-sponsored study to determine how these schools transformed themselves into high-achieving schools.

One major source is Marzano, R.J. (2000). *A New Era of School Reform: Going Where the Research Takes Us*. Aurora, CO: Mid-continent Research for Education and Learning. The central premise of this report is that the cumulative research of the last 40 years provides educators with some clear guidance about the characteristics of effective schools and effective teaching. After aggregating data from several different research studies on the effects of school, teacher, and student variables on student achievement, the report concluded that schools can strongly influence student achievement.

The following resources are Internet links @mcrel.org  [Mid-Continent Regional Educational Laboratory] Asking the Right Questions: A School Change Toolkit. Visit this site for more detail.

Standards
- McREL Standards Resources
- *Complexities of standards-based reform*, Eisner & Marzano
- *Noteworthy Perspectives on Comprehensive School Reform*, pp. 19-26 Chapter 4

Curriculum
- *A Distillation of Subject-Matter Content for the Subject-Areas of Language Arts, Mathematics, and Science*, by John S. Kendall, Christina Snyder, Michael Schintgen, Angela Wahlquist, and Robert J. Marzano
- McREL Eisenhower Consortium for Math & Science

Instruction
- *What Works in Classroom Instruction*, by Robert J. Marzano, Barbara B. Gaddy, and Ceri Dean
- *A Theory-Based Meta-Analysis of Research on Instruction*, by Robert J. Marzano and John S. Kendall
- *Including At-Risk Students in Standards-Based Reform: A Report on McREL's Diversity Roundtable II*

Assessments
- McREL Assessment Products
- "Hot Topics" on Assessment
- Improving Classroom Assessment: A Toolkit for Professional Developers, Toolkit98
- *Assessment of Culturally and Linguistically Diverse Students: Considerations for the 21st Century* by Aida Walqui, Ph.D.
Professional Development
- National Staff Development Council Standards for Staff Development
- Professional Development: Learning from the Best
- Teachers Who Learn, Kids Who Achieve: A Look at Schools with Model Professional Development
- Revolutionizing America's Schools: Democracy, Powerful Learning and the Professional Imperative, by Carl D. Glickman
- Leadership Folio Series: Professional Development

Leadership
- Leadership for School Improvement. McREL's 1999 guide for leaders describes the need for school leaders to create patterns of distributed leadership in order to involve staff in key decisions.
- Leadership for School Improvement (2000)
- Creating a School Reform Team
- Leadership Folio Series: Guiding Comprehensive School Reform
- Developing Organizational Learning in Schools, by Susan Toft Everson
- Facilitative Leadership: The Imperative for Change. This 1992 guide from SEDL discusses successful leadership strategies that help promote change, including when leaders communicate the purpose of their school and their vision for improvement, then demonstrate commitment to that vision.
- Shared Decision-Making Process. This page from NCREL's Pathways to School Improvement Web site describes a shared decision-making process developed by Springfield Public School District 186, Springfield, IL.

Internal Communication
- Excerpt on Internal Communication
- Learning for Understanding in Individuals and Organizations, by David Perkins McREL 1998 Fall Conference Keynote Session

Climate and Culture
- Excerpt from Leadership for School Improvement
- Understanding the Keys to Motivation to Learn, by Barbara L. McCombs
- Belief and Research: Culture, Context and Dysfunctional Paradigms 1998 McREL Fall Conference session facilitated by Asa G. Hilliard, III

External Environment
- Excerpt on environment from Leadership for School Improvement
- McREL Policy Briefs
- What Americans Believe Students Should Know: A Survey of U.S. Adults, by Robert Marzano, John Kendall, and Louis Cicchinelli
- The Good, and Not-So-Good News About American Schools, by John F. Jennings and Diane Stark Rentner
- Including At-Risk Students in Standards-Based Reform: A Report on McREL's Diversity Roundtable II
Stakeholders

- Leadership Folio Series: Family and Community Involvement
- *Increasing Parental Involvement: A Key to Student Achievement*, by Dan Jesse

Resource Allocation

- Leadership Folio Series: Resource Allocation
- *Innovative Approaches to Maximizing Resources* in Noteworthy Perspectives on Comprehensive School Reform, by Mike Arnold, Nilda Garcia Simms, and Diane McIntyre Wilber
- McREL Resource Allocation support materials
- Probe: Designing School Facilities for Learning

Technology

- Products: Internet Safety
- Products: Technology and Teacher Education
- Products: Funding for Technology
- Products: Telecommunications Discounts for Schools

Accountability

Accountability: A Brief History

- *A Comprehensive Guide to Designing Standards-Based Districts, Schools, and Classrooms* by Robert J. Marzano and John S. Kendall
- *McREL Policy Brief: Standards-Based Accountability Systems* by Jan Stapleman