Planning That Matters: Helping Schools Engage in Collaborative, Strategic Problem Solving
By Craig Jerald

Problems With the Planning Process

Earlier this year, the Prichard Committee for Academic Excellence released a report highlighting practices in Kentucky's high-performing, high-poverty schools. Researchers collected information using the same audit tool that the Kentucky Department of Education uses to diagnose problems in schools identified for improvement, then compared those results with similar information amassed by state-conducted audits of low-performing schools.

The analysis yielded some unanticipated results. While the successful schools scored well on some areas of the audit, they did not score well on indicators related to comprehensive planning. Indeed, the data revealed no significant difference between high- and low-performing schools on any of 16 indicators measuring how well schools had followed the recommended process for creating Comprehensive School Improvement Plans.[1]

What can this mean? Do high-performing schools really not bother to engage in systematic planning? Is there no real relationship between good planning and measurable school improvement?

The answer, of course, is no. The same study revealed that high-performing schools engage in more collaborative decision making, work harder to connect professional development to student achievement data, and make more efficient use of time and resources. None of those activities is possible, or at least possible to do well, without serious and thoughtful planning.

When asked to comment about this apparent paradox, an audit team member said of one school, "Their [Comprehensive School Improvement Plan] was not exemplary, but their school was. They are planning, but it did not get captured in that document, not formally." Another recalled having seen the reverse situation when participating in state audits of schools needing improvement. Some low-performing schools had crafted "model" plans and documentation, this team member said, but "did not appear to be doing much of it in the classrooms."[2]

Instead of dismissing this finding as a bizarre anomaly, policymakers and assistance providers would do well to ponder its implications. Too often the formal planning process required by state and federal policy is perceived as a bureaucratic exercise resulting in written plans that do not drive real change efforts for the day-to-day work of schools. And too often it is disconnected from the kind of planning that can lead to significant, measurable improvement.

The problem is not that states have done a bad job in explaining the requirements for formal planning or providing tools to do the job well. Most states, Kentucky included, have put considerable energy into creating materials to assist comprehensive school improvement planning. Washington, for example, now offers an interactive Web tool that walks schools through a guided, eight-step planning process, along with a 170-page guidebook that includes everything from sample meeting agendas to document templates. Many independent organizations have published excellent tools and guidebooks as well.

The real problem is that schools can follow all of the recommended steps for formal planning, engage in all of the activities

and meetings suggested, and even craft excellently written plans, yet—even with hands-on assistance—*still* not engage in the kind of deliberate activities that propel real change and drive professional work in effective schools.

Problem Solving That Is Strategic and Collaborative

Formal planning and documentation are important responsibilities under state and federal law, and we certainly want schools to approach them seriously and conscientiously. However, if we are to realize success in helping all of our low-performing schools get onto a path leading toward sustained improvement in student outcomes, we also must find ways to isolate and understand the kind of real-life planning that matters most, provide compelling examples of it, and deliberately build the capacity of all schools to engage in it.

A glimpse into that kind of planning can be gleaned from the full findings of the Kentucky study as well as other recent research on high-improving schools elsewhere in the United States. The picture that emerges is one that *sometimes* has to do with the formal planning process with which we all are familiar, but almost *always* has to do with a deeper layer of planning that can best be called *collaborative, strategic problem solving.*[3]

What Do We Mean by "Problem Solving?"

Last year, the principal of New Mexico's Roswell High School told a team of visiting researchers that he attributed part of his school's success to the school's philosophy of improvement. "[We] have a credo here: Dinosaurs disappeared because they did not change. We assess things regularly. If

something doesn't work, we change it."[4] If that sounds like the very essence of simple common sense, it is. But it is a kind of common sense that is all too uncommon in American education and all too rarely understood.

Problem-solving schools:

- Establish a results-based orientation focused on tangible student outcomes. First, staff members firmly believe that whatever other functions schools might perform in a community, they are *at least* and *primarily* responsible for making sure that students learn. Second, they take direct responsibility for student achievement. They do not get mired in the belief that family and social problems present insurmountable obstacles to learning. Instead, they believe that what children experience within schools and classrooms can have a decisive impact on whether and how much they learn.

- Relentlessly analyze data and other empirical evidence at all levels—student, grade, subject, and schoolwide—to identify problems. Then they gather additional evidence to identify internal weaknesses that are causing or abetting low outcomes and obstructing improvement.

- Identify possible solutions to problems and opportunities for making changes that will lead to greater success. They use common sense, creativity, and extensive investigation of research- and evidence-based practices to decide among those possible solutions.

To understand how these three things might work together, consider a hypothetical example based on a challenge all too common in U.S. high schools.

A high school improvement team identifies a problem with particularly low achievement and high retention rates in the ninth grade. Rather than simply assuming that most 14-year-olds naturally struggle because of "hormones," they collect additional information that might explain the problem and find that high ninth-grade failure is partly due to low literacy levels among entering freshmen.

Although the problem at first seems "outside their control," team members take responsibility and seek solutions. After examining the research and seeking examples of schools that have addressed the problem, they consider working with a handful of feeder middle schools to craft "transition standards." The standards could include implementing diagnostic assessments as part of an "early warning system," creating a "fast track" literacy program to provide immediate and intensive help for students who need it, and changing the master schedule to reduce class sizes and assign more experienced teachers to ninth-grade classrooms.

New Mexico's Roswell High School offers another example. As improvement team members investigated factors behind high rates of classroom absenteeism, they found that a large number of students were visiting the school's health room complaining of headaches, stomach aches, and dizziness. Digging deeper, they discovered that many students were not taking advantage of the federally subsidized breakfast program because there was not enough time. The school decided to expand first period by 10 minutes and later even began delivering breakfasts to classrooms to make sure students had eaten and were ready to learn. Visits to the health room dropped by 80 percent.[5]

Of course, all schools that go through a formal planning process engage in a similar set of steps as part of a required needs assessment. But problem-solving schools approach the task from a more powerful perspective—one that confronts problems more openly and deals with them more aggressively in the following ways:

- They diagnose problems and solutions from an "inside-out" orientation that first considers classroom instruction, schoolwide policies and arrangements, and finally external family, community, and social factors—instead of "blaming" nonschool factors first (e.g., "parents are uninvolved, so students don't do homework and can't learn").

- They "dig deeper," examining a full range of internal practices and conditions that might be causing low achievement and impeding improvement, including areas that often are ignored or glossed over because it is uncomfortable to talk about them. For example, these schools examine "opportunity gaps" within the school to determine if poor, minority, and low-achieving children are less likely to have access to qualified teachers, demanding classwork, and rigorous curricula. (See The Center's January 2005 policy brief, *Establishing a Strong Foundation for School Improvement*, for a more extensive discussion of the inside-out orientation and why schools should commit to examining opportunity and practice gaps.)

- They treat practices, policies, and arrangements as "variables rather than givens" and are much less likely to believe something cannot change simply because

"that's the way we've always done it." Because they have less respect for the inflexible traditions and sacred cows of the past, they benefit from an expanded sense of what can be discarded, adapted, or changed within their schools.

To illustrate why this notion of strategic problem solving is different from traditional needs assessments and planning—*as such activities often play out*—consider a discrete, concrete example: the vexing issue of teacher quality and classroom assignments.

A number of recent studies have confirmed that novice teaches are far less effective at raising student achievement over the course of a school year than their more experienced colleagues.[6] Yet low-achieving, high-poverty, and high-minority students all are more likely to be assigned to inexperienced teachers. The fault does not lie only with forces outside a school's or district's control, either. Researchers in North Carolina recently found that nearly two thirds of the statewide black-white gap in exposure of elementary school students to novice teachers is due to the inequitable assignment of students to teachers within districts, with between one quarter and one third exclusively due to inequitable assignments *across classrooms within the same school.*[7]

Such patterns persist at the high school level, too, where the strongest, most experienced teachers are often assigned to teach Advanced Placement (AP) and honors subjects to "the best" juniors and seniors, while novice teachers assigned to ninth-grade classes struggle to help low-achieving freshmen get caught up.

Yet teacher-quality gaps are seldom, if ever, documented in formal needs assessments or addressed in written plans. Even though most schools and districts have ready access to information that could easily be used to analyze staffing patterns, these inequities largely have remained hidden from view, in part because schools take student assignment for granted and have not traditionally considered it related to student performance and school improvement. Some schools ignore it because they do not want to upset middle-class parents who often push administrators to assign their children to more experienced teachers.

However, some problem-solving schools and districts are finding ways to *intentionally match their strongest teachers with their weakest students.*

In Hamilton County, Tennessee, teachers who demonstrate high effectiveness in raising student achievement are eligible for significant bonuses and other incentives if they transfer to one of nine persistently underperforming elementary schools in Chattanooga, Tennessee. The district also has worked with local foundations to improve leadership, provide intensive teacher support, and reward success in those schools, making them better able to retain excellent teachers in the long run. Some of the nine schools have gone a step further and have begun to use achievement data to match students who are weak in a particular mathematics or reading skill to teachers who are especially adept at teaching that skill.[8] Together, these efforts are paying off. Last year, the state of Tennessee judged all nine schools to be achieving at above-average or exceptional rates of annual growth in student learning.[9]

Are these isolated examples? There is some evidence that high-performing and steadily improving schools in general are more likely to have confronted difficult staffing issues. For example, audit teams participating in the Kentucky Prichard Committee study heard descriptions of more purposeful teacher assignments that deliberately tried to match teacher strengths with student needs. One audit team member observed, "They move teachers into grade levels based on teaching strengths, [even the] veteran teachers. One 27-year teacher is moving to another grade."[10]

What Do We Mean by "Strategic?"

Problem-solving schools do not simply write, sign, seal, and deliver an improvement plan once problems have been candidly identified, strengths and weaknesses have been assessed, goals have been prioritized, and solutions have been chosen. They shape their solutions into a coordinated and thoughtful strategy to be implemented over a given period of time.

Problem-solving schools:

- Consider internal alignment. Do their proposed solutions (i.e., the changes they intend to make and new practices and programs they intend to implement) align with one another? Or do they conflict in such a way that one will undermine another? Do they add up to a coherent package? Do they offer the best fit for a school's particular culture and context? What additional variables, if left unaddressed, will offer roadblocks to any or all of the solutions?

- Consider external alignment. How well do their solutions align with district and state goals, policies, and reform efforts?

- Decide how to line up existing resources to support their solutions, including budgets, time, and available staff, as well as where they might obtain additional resources if necessary.

- Proceed from an assumption that problem solving and improvement is an ongoing process rather than a once-a-year exercise. They plan ahead to examine data and other hard evidence on whether a solution or set of solutions is working, and they commit to adapt solutions or change course entirely whenever

necessary. Of course, the nature of the solution and the availability of evidence both determine whether it is possible to establish a formal timeline or final deadline for such review, though both can help ensure it happens.

Equally important, though, is the attitude behind the commitment. As one principal told the author of a recent study comparing California schools that had sustained improvement with schools that had not, "You can't feel sorry that something doesn't work; you just have to try something different."[11]

Problem Solving …	… That Is Strategic …	… and Collaborative
> Focus relentlessly on measurable student results and take professional responsibility for them.	> Evaluate internal alignment of solutions and coherence of overall strategy.	> Share responsibility for problem solving among teachers, administrators, and support staff.
> Identify problems using student performance data and other evidence.	> Evaluate external alignment of solutions with state and local goals, policies, and reform efforts.	> Ensure broad-based involvement of stakeholders in the problem-solving process—including parents, community members, and students.
> Candidly assess weaknesses using data on opportunity gaps and practice gaps as well as other sources of information.	> Engineer solutions or whole-school reforms to fit specific contexts and conditions of school.	> Share data openly among staff members and with external partners.
> Identify potential solutions, using an appropriate research base combined with common sense.	> Line up resources to support solutions.	
> Decide what to change, treating all school policies, practices, and arrangements as "variables."	> Proceed from the assumption that improvement is ongoing.	

What Do We Mean by "Collaborative?"

The research is very clear that sustained improvement requires shared responsibility for problem solving and coordinated effort among staff members.

Problem-solving schools:

- Distribute responsibility for analyzing data, brainstorming solutions, and developing improvement strategies among teachers, administrators, and support staff.

- Ensure broad-based involvement of stakeholders, including parents, community members, and secondary-level students, in the problem-solving process and strategic implementation of solutions.

- Have school leaders who share all data openly so problems, obstacles, and opportunities are transparent and everyone knows what is at stake.

A long-term study of Washington schools achieving and sustaining significant improvement found that a major factor differentiating those schools from schools "on the slow track" was that improvement efforts were carried out by a "schoolwide team rather than random associations of individuals." About 70 percent of high-improving schools implemented shared, schoolwide strategies as opposed to about 20 percent of comparison schools. Nonimproving schools were four times as likely to have implemented individual strategies instead of schoolwide reforms.[12]

Surprisingly, given the popular notion that it takes high-profile "superstar" principals to turn around low-performing schools, *every one of the eight* high-performing schools in the Kentucky Prichard Committee study were found to have a culture of shared decision making rather than an authoritarian leader.[13]

On the other hand, some researchers have sounded a cautionary note about waiting too long to achieve buy-in from everybody on staff before committing to a reform strategy. A study examining *slow-improving* schools in Washington found that some schools had "an excessively consensus-oriented approach to change" that can act as "a major impediment to having reform take hold and move forward."[14] Clearly, schools need help finding the appropriate balance.

Many schools treat requirements for parent, community, and student involvement in the planning process as merely a meaningless courtesy or an empty nod to political correctness. That is unfortunate because such "external" involvement can help put a healthy pressure on educators to grapple with sensitive issues and candidly address crucial weaknesses.

Consider the case of North High School in Denver, Colorado. Many teachers blamed high ninth-grade failure rates on the fact that students were entering North High unprepared for high school-level work. However, a team working to identify problems at the high school used commonly available data to point out that, if so, the school was deploying its resources in a counterproductive way. The 9th-grade student-to-teacher ratio was about 30-to-1, compared to a ratio of about 12-to-1 in the 12th grade. Moreover, because the school typically employed only one counselor per grade level, the 9th-grade student-to-counselor ratio was 572-to-1, compared to a 213-to-1 ratio in the 12th grade.

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The group also conducted a survey that revealed that 97 percent of North High students wanted to go to college, but more than half did not think they were being adequately prepared to do so, and one in three was not even carrying a full course load. The researchers pointed out that while North High's current school improvement plan asserted that "Advanced Placement and college preparation courses … prepare our students for the challenges of postsecondary education," the school offered only *six* AP courses total to a student body of more than 1,500.[15]

But this story has a twist. The team working to identify and document these problems did not include any faculty or administrators. In fact, it was composed entirely of students who had formed an advocacy group called *Jovenes Unidos*, which in turn was inspired and supported by a local Latino activist organization.[16] So clearly students, parents, and community groups can be valuable partners in school improvement efforts if allowed … and sometimes even if they are not.

Building Capacity for Problem Solving

Policymakers, education officials, and school assistance providers must take the lead in helping schools become better strategic problem solvers. That means more than simply outlining a few additional steps in the formal planning process or offering a supplemental tool (although neither of those things would hurt). Good problem solving works best as a continuous process, and we must learn how to help educators develop the mindset and skills necessary to candidly identify and actively solve problems as a regular part of their everyday work.

Here are a few additional recommendations for building the problem-solving capacity of public schools:

1. *Provide schools with the latest research showing the effect of in-school factors on student achievement and attainment.*

   Many teachers and administrators continue to place excessive emphasis on family and social factors in explaining educational outcomes because they are not familiar with recent research revealing the power of schools and classrooms to significantly influence student achievement. This includes the growing body of "value-added" research demonstrating that effective classroom teaching is the strongest variable of all in determining how much students learn from year to year. During the coming year, The Center will offer valuable tools for communicating about this research with educators.

2. *Give schools the resources they need to effectively examine data and other kinds of evidence.*

   Schools generally need three things before they can engage in the analytical work at the heart of problem solving: (1) data and other kinds of telling evidence to examine; (2) adequate time to examine them; and (3) the expertise to examine them thoughtfully.

   State and local leaders should commit to providing schools with timely data and help them find the time required to analyze the data thoroughly. When asked how their state could help them continue to improve, principals in one study of high-improving schools "said they could target their efforts much more effectively if they had better information. They also pointed to having little time to undertake the kind of

ongoing, thoughtful analysis of their needs, which they believe necessary to make major improvement."[17]

Of course, problem-solving schools examine many kinds of evidence, only some of which gets delivered to the schoolhouse door through official channels. Sometimes schools must actively "harvest" additional data from the following kinds of sources:

- Reports or Web sites published by federal, state, or local agencies (an often overlooked resource mined very effectively by North High School's *Jovenes Unidos*).

- Files or databases maintained by state or district agencies.

- Artifacts that can be found within the school itself (e.g., some high schools are learning to analyze their master schedules to identify inefficiencies in how they distribute learning opportunities, allocate time, and deploy staff).

Finally, of course, educators and external partners need to know how to analyze such evidence, especially how to cross-tabulate information to look for telling patterns. While "data-driven decision making" has become the latest buzzword in the school improvement arena, few educators know where to look to find the best practical assistance on how to do it.

3. *Encourage schools to ask hard questions about their outcomes, policies, and practices, and provide incentives that reward them for doing so.*

Unfortunately, school administrators traditionally have been rewarded for

hiding problems rather than publicly revealing and dealing with them. As a result, the data and other evidence presented in too many school improvement plans are shaped either to make the school look good or to make a preconceived improvement strategy look good. Effective problem-solving schools dig deeper to analyze all kinds of data and evidence, no matter how uncomfortable, and they use those hard facts to drive solutions rather than the other way around. Educators who "dig and dish" difficult truths about their schools should receive praise, and principals in such schools should be held up as examples among their peers.

4. *Provide training in how to use available research to craft solutions to identified problems and weaknesses.*

Hugh Burkett, director of The Center, recalls working in one district where "we got very good at using data to define problems, but not very good at using data and the research base to identify solutions." Identifying weaknesses is important, but only if doing so leads to effective solutions.

5. *Help schools transition from writing multiple plans that are meaningless to one strategic plan that can drive change.*

Even well-intentioned laws and regulations can push schools to adopt a "paper chase" approach to planning rather than an organic, problem-solving orientation. States should consider accepting a single unified plan for federal programs and provide a template to help schools craft it.

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6. *Help schools find ways to develop a truly broad-based, collaborative approach to problem solving.*

Problem solving and planning must be "staffwide work" rather than simply "committee work." In larger schools where a team must guide the process for practical purposes, principals can rotate team members regularly and establish formal mechanisms for involving a wide range of other staff members in analyzing data and proposing solutions to problems.

Schools often need help thinking about how to involve parents and community members, especially when it comes to inviting collaboration based on honest data about the need for change. But good examples can be found: Norview High School in Norfolk, Virginia, began experiencing significant support from parents after showing hundreds of them a slide presentation about low test scores.[18]

Conclusion

Collaborative, strategic problem solving is not just another "activity" that educators must somehow learn how to perform on top of their already busy work lives. In our most effective schools, it is a *deeply ingrained way of perceiving and approaching day-to-day work*—one that is fundamentally different from the fatalism too often encouraged by the traditional culture of American education.

It requires the conviction that what happens within school buildings can make a profound difference in the learning of disadvantaged students; the willingness to accept responsibility for student achievement; the courage to zealously identify and publicly expose areas of weakness in deeply entrenched traditions and practices; a determined ingenuity in the face of finite resources; and the desire to do whatever it takes to increase learning.

Most educators want desperately to improve educational outcomes for their students—many are ready for such a change—but they will need considerable help from policymakers, leaders, and assistance providers to make it happen.

Endnotes

[1] Kannapel, P. J., & Clements, S. K. (2005). *Inside the black box of high-performing, high-poverty schools.* Lexington, KY: The Prichard Committee for Academic Excellence. (page 23)

[2] Kannapel, P. J., & Clements, S. K. (2005). *Inside the black box of high-performing, high-poverty schools.* Lexington, KY: The Prichard Committee for Academic Excellence. (page 23)

[3] Jerald, C. (2003). Beyond the rock and the hard place. *Educational Leadership*, *61*(3), 15–16. See also: Hillman, L. S. (2004). *Breakthrough high schools: You can do it, too! Vol. 1.* Reston, VA: National Association of Secondary School Principals. (pages 3–4).

[4] Hillman, L. S. (2004). *Breakthrough high schools: You can do it, too! Vol. 1.* Reston, VA: National Association of Secondary School Principals. (page 29).

[5] Hillman, L. S. (2004). *Breakthrough high schools: You can do it, too! Vol. 1.* Reston, VA: National Association of Secondary School Principals. (page 29)

[6] Viadero, D. (2005). Teacher turnover tracked in city district. *Education Week*, *24*(24), 16. One recent study found that an otherwise highly effective teacher capable of improving student achievement by nine points annually would only be able to raise achievement by five points if he or she were a first-year teacher. See also: Hanushek, E. A., Kain, J. F., O'Brien, D. M., & Rivkin, S. G. (2005). *The market for teacher quality* (Working Paper No. 11154). Cambridge, MA: National Bureau of Economic Research. (page 29).

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[11] Chrisman, V. (2005). How schools sustain success. *Educational Leadership*, *62*(5), 16–21.

[12] Lake, R. J., Hill, P. T., O'Toole, L., & Celio, M. B. (1999). *Making standards work: Active voices, focused learning.* Seattle, WA: Center on Reinventing Public Education, University of Washington.

[13] Kannapel, P. J., & Clements, S. K. (2005). *Inside the black box of high-performing, high-poverty schools.* Lexington, KY: The Prichard Committee for Academic Excellence. (page 18)

[14] McCarthy, S., & Celio, M. B. (2001). *Washington elementary schools on the slow track under standards-based reform.* Seattle, WA: Center on Reinventing Public Education, University of Washington. (page 26)

[15] Jovenes Unidos & Padres Unidos. (2004). *North High School report: The voice of over 700 students.* Denver, CO: Author.

[16] Anas, B. (2004, March 17). Students at North: School is failing us. *The Denver Post*, p. B-03.

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About The Center's Policy Briefs

This is the second in a series of four policy briefs to be published by The Center for Comprehensive School Reform and Improvement in 2005. The first, *Establishing a Strong Foundation for School Improvement*, was released in January. The briefs are intended to provide fresh insights and useful advice to policymakers and school assistance providers.

This year's four-part series is structured around The Center's emphasis on school improvement and reform as a collaborative, schoolwide cycle of activities: (1) organizing for improvement, (2) planning for improvement, (3) implementing improvement plans, and (4) sustaining improvement efforts. Each publication addresses one of those areas and builds upon the ideas and strategies discussed in the preceding briefs. Therefore, we recommend reading them in order and using them in concert.

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