The Core Practice Framework

A Guide to Sustained School Improvement

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identify
inform
improve

Introduction:
The Need for a Coherent Approach to Improving Teaching & Learning

America's educational reality is falling short of our nation's ideals. Currently, only a minority of students receive a K-12 education that prepares them well for the challenges of college, skilled careers[1], and informed citizenship (ACT, 2011). Yet the American ideals of fairness, democracy, and economic opportunity compel us to provide such an education to all students. This could be viewed as placing disconcerting demands on educators to do the impossible—or as presenting a golden opportunity to build society-wide support to meet this challenge.

Concerned citizens and policymakers often see educational improvement in terms of isolated reforms: better teacher training; higher teacher salaries; smaller schools; higher quality textbooks; improved reading and mathematics programs; better tests; more parental choice options; more parental involvement; stronger discipline; or any of a myriad of other changes that might be expected to improve student learning.

In contrast, educators in higher performing schools tend to view reforms not in isolation, but as interlocking puzzle pieces; the fitting together of the pieces to complete the puzzle is as necessary as the individual pieces themselves. An incorrect fit, the insertion of a piece that does not belong, or the absence of necessary pieces can result in an incomplete final picture. Thus, the lack of a coherent, big-picture approach to school improvement often results in the disappointing failure of many promising educational reforms.

[1] Research by ACT indicates that the skills needed for college are similar to those required for training programs leading to skilled occupations (ACT, 2006).

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What fundamental ideas underlie a coherent approach to educational improvement?

First, only a system-wide approach to improving teaching and learning can make it possible for students to receive quality teaching, year after year, across different subjects, from preschool through the end of high school. Given the difficulty of the task, isolated and uncoordinated efforts by individual educators are not enough.

Second, students must be placed on the path to college and career readiness as early as possible—ideally in preschool and elementary school, but no later than middle school. Waiting until high school to boost poorly prepared students onto a path to college and career readiness places "an extreme degree of difficulty" on educators and is unfair to students (Neild & Balfanz, 2006; see also Dougherty, 2010).

Third, efforts to improve teaching and learning must give first priority to the behaviors most closely related to the teaching-learning transaction by addressing the following key questions:

1. What do we expect all students to know and be able to do in each course, grade and subject?

2. How do we select and develop the leaders and teachers needed to ensure every student in the system meets these expectations?

3. What programs, strategies, materials, and time allocation do we use to teach the necessary content and skills to students?

4. How do we know if students learned what they should?

5. If students are not learning what they should, what do we do about it?

This paper discusses how educational leaders and policymakers can use research on higher performing schools and districts to address these questions and promote a coherent, big-picture approach to school improvement. In Section 2, we discuss telltale symptoms that indicate whether a school system is lacking such an approach. In the third section, we introduce the Core Practice Framework, which can be used to develop an approach based on a systematic comparison of local practices with those of higher performing schools. In Section 4, we describe the genesis of the Framework in the systemic school improvement literature, effective schools research, and NCEA's extensive research on higher and average performing schools. Section 5 describes how educators can use the Framework to support coherent school improvement efforts. Finally, the Conclusion reiterates the importance of using a coherent framework of core practices to guide long-term improvement efforts.

2. Symptoms Indicating a Coherent Improvement Approach is Missing

How can an observer tell whether a school district has a coherent, system-wide approach to school improvement? The following are indicators that such an approach is absent:

- **Curriculum is neither consistent across classrooms nor aligned across grade levels.** Many students who thought they were doing well in one level (say, elementary school) later discover they were poorly prepared for the next level. The curriculum can be unintentionally repetitious (e.g., four separate units on dinosaurs in elementary school), while important content with which teachers are less familiar is omitted. There is large variation across classrooms and schools in what students are expected to learn and how much academic challenge they face. Meanwhile, teachers complain about the skills they see in the students who come from their own district's prior grades and classrooms, but no action is taken to correct the situation.

- **Teachers feel isolated and unsupported.** Teachers, especially new teachers, feel they have little support from district- or school-level leaders in the areas of curriculum and instruction. On their part, district and school administrators believe those areas are mainly the domain of classroom teachers. Teachers work in isolation from one another and, lacking support, feel overwhelmed or oppressed by the demands placed on them by the state and district accountability systems. Teachers rarely, if ever, visit other teachers' classrooms or discuss what is or is not working instructionally.

- **Improvement initiatives are disconnected.** The district has many programs or initiatives layered on top of one another. New programs and initiatives are adopted with little analysis of how they fit in with or replace what is being done already. Often, new programs are adopted before teachers have had time to assimilate the old ones. Turnover in leadership leads to almost automatic turnover in programs, initiatives, and strategies. District personnel have little idea how well programs are being implemented or what impact, if any, they are having in classrooms.

- **Short-term fixes are given priority over long-term goals.** The district's response to standards and accountability seems to focus heavily on test preparation and other short-term measures to keep schools from being labeled as low performing. "Bubble students" who appear to be close to the margin of passing or failing the state test receive a disproportionate share of attention. If a school is rated unfavorably, conversation focuses on the number of students by which the target was missed, rather than on the practices that led to the low rating in the first place. Untested subjects are given short shrift. At the elementary level, K–2 teachers are not included in conversations about student performance on state and district assessments in grades 3 and higher.

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■ **Instruction and academic interventions are not tailored to the needs of students.** Instruction does not take into account where students are academically: ahead, on grade level, or behind. Students who have already mastered the curriculum continue to do the same work as students who have not, or are given extra worksheets to complete. Students who have not mastered prior objectives simply continue to the next ones; thus, the gaps in their learning accumulate over time. Developing strategies for students who are behind is treated as a problem for each teacher to solve alone, and the extra help these students receive is often not matched to how far behind they are.

All of these behaviors and practices indicate the lack of a long-term, coherent, and sufficiently comprehensive approach to improving teaching and learning.

3. The Core Practice Framework: A Coherent Improvement Approach

The Core Practice Framework is designed to help educators and policymakers develop and support a coherent, comprehensive, and sustained approach to their improvement efforts. The Framework provides both *structure,* a way of categorizing those educational practices that distinguish higher performing schools from others, and *content,* information on the practices themselves. As such, it provides an organizing guide for all improvement decisions. Such a guide has been sorely missing from the majority of educational discussions.

Structure of the Framework. The structure of the Framework is built around five primary themes that must be addressed in order to improve teaching and learning in a school system. These themes reflect the five key questions presented on page 2.

Theme 1: *Curriculum and Academic Goals*—clarifying what is to be taught and learned by grade and subject.

Theme 2: *Staff Selection, Leadership, and Capacity Building*—developing high-capacity leaders and teachers who collaborate to ensure students reach ambitious learning goals.

Theme 3: *Instructional Tools: Programs and Strategies*—systematically identifying and adopting programs and strategies that work; ensuring that leaders and teachers have the strongest, most proven resources available.
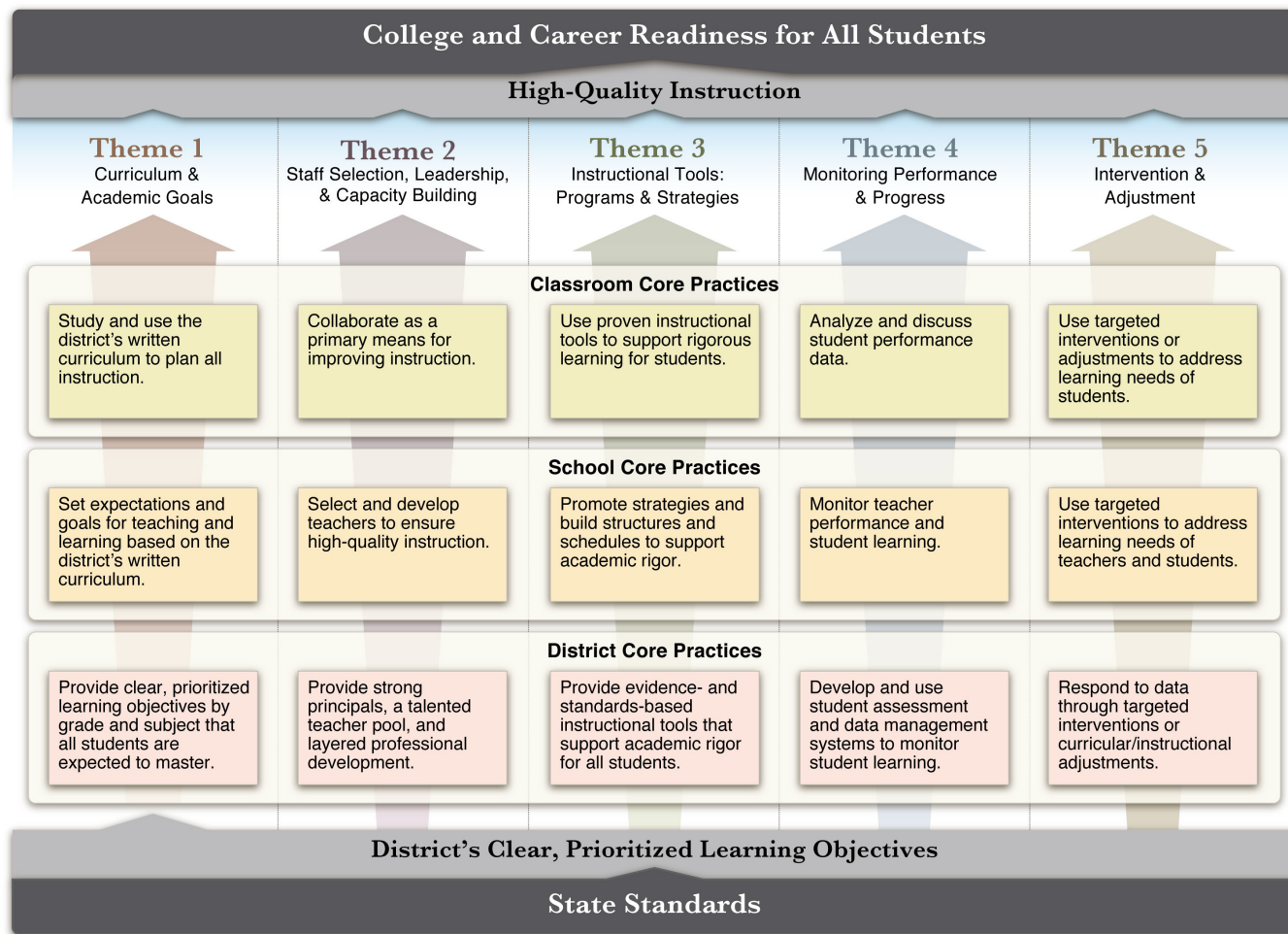
Theme 4: *Monitoring Performance and Progress*—using assessment information to keep track of where and when learning is taking place and whether students are meeting growth and performance goals.

Theme 5: *Intervention and Adjustment*—responding quickly and appropriately to information on student learning.

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For each theme, there is an optimal division of labor among the school system's three organizational levels—district, school and classroom. Failure to divide the labor correctly across these three levels places an excessive burden on one or more of the levels and reduces the odds that sustainable improvement can be achieved. The combination of five themes and three organizational levels provides the framework for the 15 Core Practices shown in *Figure 1.* We describe these practices as "core" to communicate their central and essential role in teaching and learning.

Figure 1

The Core Practice Framework

College and Career Readiness for All Students

High-Quality Instruction

Theme 1 Curriculum & Academic Goals	**Theme 2** Staff Selection, Leadership, & Capacity Building	**Theme 3** Instructional Tools: Programs & Strategies	**Theme 4** Monitoring Performance & Progress	**Theme 5** Intervention & Adjustment
Classroom Core Practices				
Study and use the district's written curriculum to plan all instruction.	Collaborate as a primary means for improving instruction.	Use proven instructional tools to support rigorous learning for students.	Analyze and discuss student performance data.	Use targeted interventions or adjustments to address learning needs of students.
School Core Practices				
Set expectations and goals for teaching and learning based on the district's written curriculum.	Select and develop teachers to ensure high-quality instruction.	Promote strategies and build structures and schedules to support academic rigor.	Monitor teacher performance and student learning.	Use targeted interventions to address learning needs of teachers and students.
District Core Practices				
Provide clear, prioritized learning objectives by grade and subject that all students are expected to master.	Provide strong principals, a talented teacher pool, and layered professional development.	Provide evidence- and standards-based instructional tools that support academic rigor for all students.	Develop and use student assessment and data management systems to monitor student learning.	Respond to data through targeted interventions or curricular/instructional adjustments.

District's Clear, Prioritized Learning Objectives

State Standards

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Reading from bottom to top as indicated by the arrows in Figure 1: *state standards and the district's clear, prioritized learning objectives (written curriculum) are the foundation. Applying the 15 Core Practices to the development and teaching of this curriculum leads to high-quality instruction. In turn, high-quality instruction in every classroom creates the opportunity for college and career readiness for all students.*

Content of the Framework. For each of the 15 Core Practices, the Core Practice Framework lists between two and six Critical Actions providing additional detail on the practice.[2] In turn, each Critical Action has multiple components used to develop rubrics that school and district personnel can use to identify how well they are implementing each action (*Figure 2*). For example, the school-level Theme 2 Core Practice on teacher selection
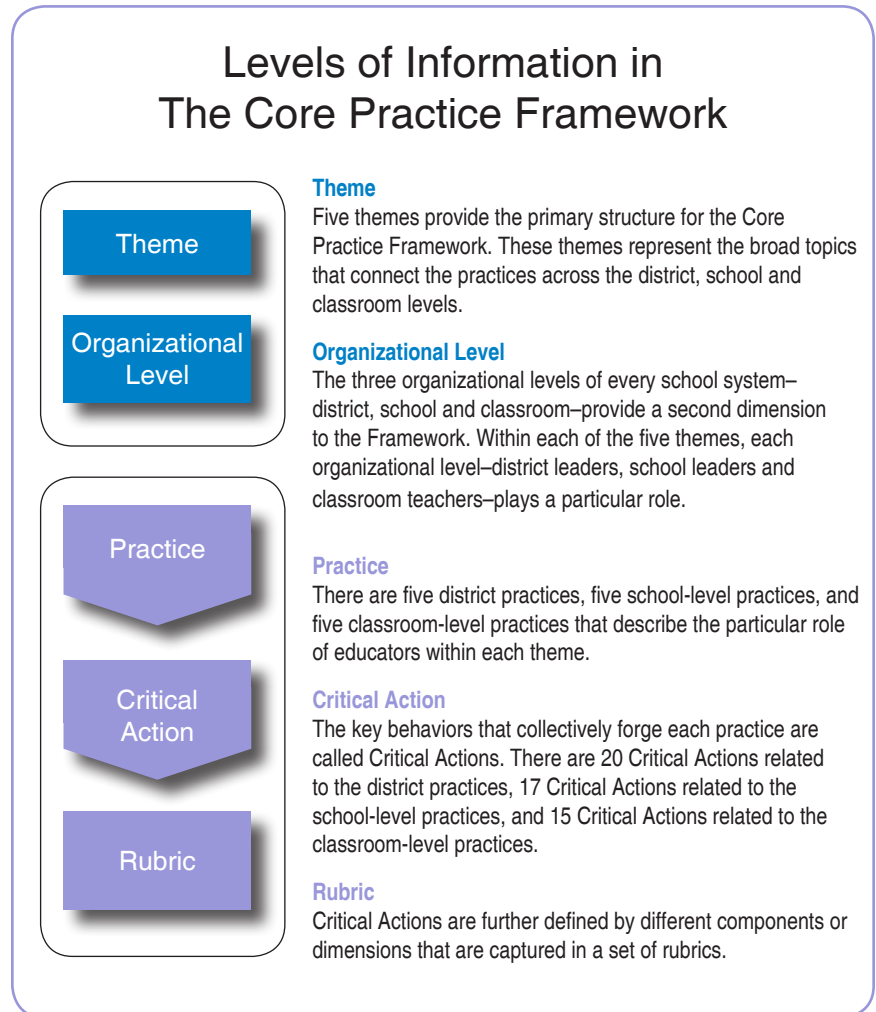
[2] See http://www.nc4ea.org/index.cfm/e/core_practice_framework for a list of the Critical Actions. A more detailed description is available on request.

and development contains six Critical Actions, one of which deals with how school leaders can promote teacher collaboration. (See p. 7, *Example of a Detailed Practice in the Core Practice Framework.*)
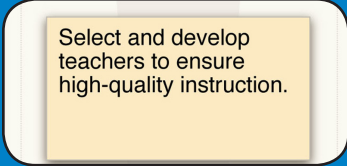
Underlying Assumptions. On reviewing the Critical Actions and their components in detail, many educators will see that these practices are well known in the field. However, it is not merely knowing about a practice that makes the difference, but meticulously implementing the details of that practice at all three levels—district, school and classroom.

Figure 2

Levels of Information in The Core Practice Framework

Theme
Five themes provide the primary structure for the Core Practice Framework. These themes represent the broad topics that connect the practices across the district, school and classroom levels.

Organizational Level
The three organizational levels of every school system–district, school and classroom–provide a second dimension to the Framework. Within each of the five themes, each organizational level–district leaders, school leaders and classroom teachers–plays a particular role.

Practice
There are five district practices, five school-level practices, and five classroom-level practices that describe the particular role of educators within each theme.

Critical Action
The key behaviors that collectively forge each practice are called Critical Actions. There are 20 Critical Actions related to the district practices, 17 Critical Actions related to the school-level practices, and 15 Critical Actions related to the classroom-level practices.

Rubric
Critical Actions are further defined by different components or dimensions that are captured in a set of rubrics.

The Framework does not provide a set of recommended lesson plans or methods for teaching specific topics. Rather, it is a set of aligned behaviors and processes intended to guide the development of a long-term, coordinated team approach to improving teaching and learning in a district, school or classroom. Educators seeking solutions to immediate problems should not overlook the value of creating a system that eliminates the constant need for short-term fixes. For example, while the content of the Framework does not detail specifically how to motivate students in a particular classroom, careful development of the Framework practices can lead to solutions that eliminate many of the root causes of low motivational levels.

Example of a Detailed Practice in The Core Practice Framework

> Select and develop teachers to ensure high-quality instruction.

Theme 2: Staff Selection, Leadership and Capacity Building
Organizational Level: School

Practice Summary
Principals and other school leaders in higher performing schools build upon the district foundation to provide leadership opportunities for teachers, customize teacher selection processes for their school, and add an additional layer of support for new teachers. School leaders foster a collaborative environment—centered on standards and data—to support all teachers. The support provided by higher performing schools includes the use of instructional coaches and customized development opportunities focused on curriculum and instruction.

Six Critical Actions underlie this core practice:
1. Provide opportunities for teachers to develop leadership capacity.
2. Establish rigorous teacher selection processes tailored to academic needs.
3. Provide new teachers with tailored support regarding curriculum, instruction and assessment.
4. Supplement district professional development to address school-specific needs.
5. Use instructional coaches to strengthen teachers' instructional skills.
6. Model and promote substantive collaboration to foster a learning community.

Details of Critical Action 6 include:
Once collaborative planning time is established, principals in higher performing schools ensure that the time is used well. These principals lead a profound shift in dialogue in team meetings—from talking about what subject matter was covered to how well students have learned that content. Through regular attendance at collaborative team meetings, principals of higher performing schools build the capacity of teachers to openly discuss standards-based instruction. In addition, by collectively examining student assessment results across classrooms, teachers identify best practices and learn to modify instruction as needed to best serve students. Extending beyond the established collaborative planning time, leaders help structure peer classroom visits for all teachers. These visits are followed by open and honest dialogue—often modeled by leaders or coaches—about what did and what did not work in the lesson.

Components
- Participate actively in teacher team meetings
- Build teachers' capacity for collaboration
- Promote collaboration through structured peer classroom visits

The support provided by higher performing schools includes the use of instructional coaches and customized development opportunities focused on curriculum and instruction.

Underlying the Framework is the idea that educators must systematically ensure that students acquire the knowledge and skills in each grade or course needed to prepare them for the grade or course that follows, and ultimately for college, skilled careers, and informed citizenship. As E. D. Hirsch (2002) notes, "A systemic failure to teach all children the knowledge they need in order to understand what the next grade has to offer is the major source of avoidable injustice in our schools." Thus, clear, prioritized objectives describing the academic content that students should master by the end of each grade level in each subject serve as the foundation for the Framework's 15 Core Practices as illustrated in *Figure 1.*

In the world of policymaking, states provide academic content standards, but districts must add more specificity to those standards. In addition, if states set their proficiency and growth targets too low to put students on track for college and careers, school district leaders must set their own higher targets. Thus, the Core Practice Framework acknowledges both a state and a district role in setting standards.

As indicated near the top of *Figure 1,* high-quality instruction is the desired result of implementing the 15 Core Practices based on the district's clear and specific learning objectives. High-quality instruction increases students' ability to meet ambitious academic goals. A variety of assessments should provide evidence on how well students are meeting these goals.

Today's reformers understand the critical importance of high-quality instruction. Yet without the Core Practices, only a few fortunate students taught by the district's best teachers are likely to experience such instruction. Although strong instruction is often viewed as the exclusive responsibility of classroom teachers, the Framework clarifies that district, school, and classroom practices are all critical to ensuring high-quality instruction in all classrooms. In the absence of a coherent system of practices at all three organizational levels to support teachers' work, we observe a common pattern of discouraged teachers leaving the profession or avoiding employment in high-poverty schools.

4. How The Core Practice Framework Was Constructed

The structure of the Framework was derived from the literature on systemic school improvement—specifically, the idea that standards, assessments, instructional strategies, and professional development all need to be coordinated and aligned, and that state policymakers, district and school leaders, and classroom teachers have different roles to play in this alignment (Smith & O'Day, 1990). The content of the Framework was derived from the approach used in the effective schools research of the past 40 years—by comparing practices in more effective schools with those in their less effective counterparts and looking for practices that correlate with performance (Lezotte, 1991; Teddlie & Reynolds, 2000).

The practice information in the Framework was accumulated over time by conducting interviews and collecting supporting documentation in more

than 550 schools in over 300 school districts in 20 states. The purpose of this research was to compare practices in higher performing schools—those that are "beating the odds" compared to schools serving similar student populations—with those in average performing schools.[3] The Framework highlights those practices in higher performing schools that differ from those observed in average performing schools.[4]

NCEA's researchers identified higher and average performing schools using scores on state tests designed to assess whether students are learning the state's academic content standards. To assess school performance, the researchers used a standard statistical value-added analysis with controls for student demographics and prior academic achievement.[5] Although schools in both affluent and low-income neighborhoods were studied, the majority of schools studied served mainly disadvantaged students.[6]

A major distinguishing feature of the school identification process was the use of at least three years of performance information. Since school performance is often inconsistent, the analysts made an effort to identify schools that outperformed others not just in a single grade or year, but consistently across grades and years.

Once the schools were identified, researchers visited each school on a 2- or 3-day site visit and interviewed the principal, other members of the school leadership team, and teacher teams. Researchers also collected documents to provide evidence of behaviors described in the interviews. Since the district role in school improvement is a key topic of investigation under the Framework, the researchers interviewed the superintendent and other individuals from the district central office and obtained documentary evidence of district policies and practices. The interviews and documentation were summarized in case studies on each school. In turn, the Critical Actions and supporting details were summarized from the case studies.

This approach to collecting and comparing qualitative information from more and less successful organizations is similar to that used in the "best practice" business management literature which compares the management practices of more and less profitable companies (Collins, 2001; Peters & Waterman, 1982). This approach is normally used in situations where the research questions do not lend themselves to the use of experimental methods—a situation common to both successful business organizations and successful school systems.[7]

The resulting content in the Core Practice Framework supports and extends earlier findings from effective schools research. For example, the effective schools literature emphasizes the importance of strong leadership; our research further explores methods used in higher performing schools for developing that leadership and the specific leader behaviors associated with instructional success. The effective schools literature emphasizes the importance of frequent student assessment; our research delves into the contrast between how teachers and leaders in higher and average performing schools use the assessment data. Many studies of effective schools emphasize the beliefs and attitudes of the adults in those schools:

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[3] Because we identified schools that were higher performing compared with their demographic peers, these schools did not necessarily have the highest performing students across all schools.

[4] Examples of practices that would not differentiate higher performing schools from average performing schools are teachers in both types of schools who regularly take attendance and provide report cards to students' parents.

[5] In some states where only "snapshot" test score data were available, a value-added analysis controlling for students' prior performance could not be conducted. In those states, we identified schools that had higher percentages of students meeting the state's proficient and advanced standards than were predicted from the schools' demographics.

[6] The majority of schools studied had more than 50% of students eligible for the federal free and reduced-price lunch program.

[7] "Experimental methods" are generally defined as those in which study subjects (e.g., students and/or educators) are randomly assigned into treatment and control groups.

The development of a coherent improvement approach is valuable in any school system, but is especially critical in those serving disadvantaged students whose learning gaps are less likely to be filled outside of school.

higher expectations, a culture of collaboration, and a belief that adults can make a difference; our research focuses on the adult behaviors that accompany these beliefs.

Because educational practices and the policy environment are constantly changing, the content of the Framework must be updated over time. NCEA researchers are currently augmenting and validating the content in the Framework by monitoring the research literature related to each Critical Action, and by conducting additional surveys and case study research in states where the state education agency has partnered with NCEA and provided the longitudinal student data needed to identify which schools are higher performing.

5. Using the Framework

The development of a coherent improvement approach is valuable in any school system, but is especially critical in those serving disadvantaged students whose learning gaps are less likely to be filled outside of school. These students must be guaranteed access to the prerequisite knowledge and skills for each learning task—access made possible through a tightly aligned and intentional system across classrooms, grades and schools.

How can school district leaders work to develop such a system?

1. They can identify performance targets on assessments in each grade and subject that indicate whether students are on target to be college and career ready by the time they graduate from high school. State education agencies and researchers at NCEA and ACT can assist in identifying these targets.[8]

2. They can use the Critical Actions and rubrics in the Core Practice Framework to systematically compare their district, school, and classroom practices with those of higher performing schools. This benchmarking process can be used to identify "leverage points" (i.e., those Critical Actions where improvement is most needed).[9]

3. They can categorize the district's current initiatives based on the Critical Actions in the Framework to determine where each initiative fits. They can identify which initiatives, if any, address the Critical Actions that the district has identified as leverage points. This analysis can be used to prioritize which initiatives to expand, maintain, or discontinue.

4. They can prioritize long-term improvement over short-term fixes, focusing on the sustained, meticulous improvement of practices that district leaders have identified as leverage points.

5. They can gain support from external constituencies for a sustained, coherent improvement effort that cannot easily be derailed by the latest education or policy fad or by changes in school or district leadership.

[8] For example, ACT has developed College Readiness Benchmarks on the ACT® test associated with a 50% probability that a student will earn at least a B and a 75% probability a student will earn at least a C in entry-level college courses (Allen & Sconing, 2005). ACT has backward-mapped these Benchmarks to its EXPLORE® and PLAN® programs for grades 8 and 10, respectively. NCEA has, in turn, mapped the ACT Benchmarks to state test results in states with which it has data-sharing agreements, establishing college and career readiness performance targets on state tests in grades 3–7.

[9] ACT offers a number of products and services to assist with this vital benchmarking process. These include Core Practice Audits, CoreWork™ Diagnostics, and Core Practice Institutes. In states where ACT has a data-sharing agreement with the state education agency, CoreWork Performance Reports are available for benchmarking school performance. See www.nc4ea.org for additional information.

6. Conclusion

A repeated lesson from the research on higher performing schools is that focusing on any single solution will not lead to all the necessary improvements in teaching and learning. Yet public conversations about education reflect a yearning for such a solution, and both educators and policymakers have a strong desire to identify a single factor that makes the difference between higher and average performing schools: "What programs do they use?" "How large is the school?" "Does the school have total autonomy to make decisions?"

A description of the detailed practices of higher performing schools will disappoint those who look for easy answers or "innovative" solutions. Higher performing schools and school systems typically do a better job than average performers of staying focused on those fundamental questions that most strongly affect teaching and learning, questions reflected in the Framework themes and Critical Actions. In addition, they have developed coherent systems for improving teaching and learning that coordinate efforts across organizational levels—district, school and classroom.

If our goal is to prepare all students for the intellectual challenges of the future, we need persistent, sustained improvement coordinated across the district, school, and classroom levels. Isolated reforms will not produce the needed results. From curriculum and academic goals, to teacher and leader selection and development, to instructional programs and strategies, to monitoring performance and progress, to interventions and adjustments based on data—Core Practices must be institutionalized. The structure and content of the Core Practice Framework provide an indispensable guide to coordinating these efforts. ∎

If our goal is to prepare all students for the intellectual challenges of the future, we need persistent, sustained improvement coordinated across the district, school, and classroom levels.

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