# HORACE:

What actually changes in Essential schools? Reporting and reflecting on the answers can supply long-term data to quide new decisions. But to be helpful, such information must reveal the interrelated aspects of change, and provide many lenses through which to look for evidence of success.

# Documenting Whole-School Change in Essential Schools

IF THEY JUST ASKED THE RIGHT questions, students in the Research and Development class at Puyallup High School speculated, they could suggest a way to improve the school's attendance rate. Working as a team with several teachers and parents, they investigated state regulations and policies from nearby schools, surveyed and interviewed classmates about what made them go to class or not, and finally presented their analysis to the staff.

"It was eye-opening," says Linda Quinn, the principal of this 1,800-student Essential school near Tacoma, Washington. "They revealed some of our practices that contributed to poor attendance, and some ways that kids were beating the system. And then they recommended that we reorganize our impersonal central attendance office so that students instead could deal directly with classroom teachers who know them." Taking the advice seriously, the faculty revised its procedures. And with attendance rising again, this unusual sociology class chose its next task: to analyze baffling fluctuations on Puyallup's standardized test scores.

Though few invite students so directly into the act, almost every school bent on improvement must face the problem of backing up its decisions with meaningful information. But what kind of questions should schools ask, and of whom? Who should be hearing the answers,

and what will they do with them? Puyallup's R&D course goes to the heart of these issues, with its unequivocal insistence that research should first shed light on whole-school problems, and then contribute to solving them. More, it demonstrates that a school can chart and analyze its progress from within, not just submit to outside "evaluation." By helping frame the questions, collect the data, and assess the results, an entire school community can create as well as document a cycle of ongoing improvement.

#### A Decade of Demonstration

As the Coalition of Essential Schools enters its second decade, it has placed new emphasis on schools' demonstrating and documenting their implementation of Theodore Sizer's Nine Common Principles. A Futures Committee report urges CES members to help create "nationally shared but locally defined" measures combining objective, subjective, and performance-based data, in order to show how school initiatives support greater student achievement.

Such efforts at measuring progress serve a number of functions. With some 900 schools using its philosophy, both the Coalition and its public (whether funders or families) need assurance that its work makes a difference to student learning. State education departments want evidence that Essential schools meet their newly emerging

BY KATHLEEN CUSHMAN

# Common Measures: Collecting the Basic Data

To document their progress, many schools routinely collect statistics on the following "common measures" (compiled by Harvard University doctoral candidate Molly Schen). When Essential schools join in doing so, they make possible useful comparisons to larger databases. (See page 5.)

#### WHO ARE WE?

- · Number of students
- · Percentage of students of different races and ethnicities
- · Percentage of students eligible for free or reduced lunch
- Socioeconomic status of the community
- Number of teachers
- · Teachers' years of experience

## WHAT ARE WE DOING? HOW ARE WE DOING?

- Teacher-student ratio
- Per-pupil expenditure
- · Dollars expended on professional develop ment
- In-grade retentions
- · Number of library books
- · Number of minutes in school day
- Graduation requirements

- · Achievement test scores in reading, writing, and mathematics
- Average daily atten dance (for students and for teachers)
- Disciplinary referrals, suspensions, tardies Urbana-Champaign
- Average SAT/ACT scores, percentage of students taking them
- Four-year graduation rate, percentage of school completers
- Annual dropout rate
- College admissions rate

Coached by their university partners, AMY students, parents, and alumni conducted focus groups and interviews, analyzed transcripts, and shadowed students through the school day before they came up with their recommendations for action. This "rich, delicious" process of "participatory evaluation" at once empowers its participants and makes it more likely that their programs will work, argues City University of New York researcher Michelle Fine, who led a similar study at New York's Crossroads School. It accustoms schools to a culture of inquiry in a "safe context," and because feedback comes at various levels and in many voices and perspectives, it nurtures multiple constituencies for reform.

Peggy MacMullen, who has assembled and analyzed for the Coalition an array of 141 research studies that in some way involve Essential School reforms, calls such documentation efforts "invisible studies"; they are meant not for an external audience but rather to help the school staff improve its practice based on the answers to questions posed internally. Nonetheless, she

standards, and districts want to compare student achievement with that in schools using different educational strategies. Parents and students keep an eye out for individual improvements in everything from kids' attitudes toward learning to the kind of assignments they bring home. And teachers watch for signs that changes in their own practice are bearing fruit.

The questions one asks to satisfy each of these audiences may be very different, though at times they intersect. But to collect and organize that information into useful and meaningful forms can be a daunting and time-consuming affair. If schools want to look honestly at how they are doing, they must first identify and prioritize their goals, then select "indicators"-questions for which they can obtain reliable and valid data to follow across categories and over time. Taking the time early on to involve key stakeholders in making these matters explicit may, in

fact, prove the critical step in the success of a school's change effort.

#### Whose Voices to Hear?

Who chooses the questions and how they go about answering them inevitably affects the picture that a school constructs of its progress. At Philadelphia's Academy for the Middle Years (AMY), for instance, a team of parents, teachers, and students worked for three years with researchers from the University of Pennsylvania and the nonprofit group Research for Action to define their central question and collect qualitative data that addressed it. "What we found caused us eventually to shift the question," says ethnographer Jody Cohen. "First the school asked how well it prepared students for high school; but after we saw how little the conventional high schools they went on to reflected our own aims, it made more sense to ask how well it prepared kids for life."



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suggests, giving the school community a sampling of the methods and results helps establish that serious self-study is under way.

Outside researchers conducting case studies in collaboration with the school offer another voice providing evidence of change without stripping data of authenticity and context. Over the last five years more than two dozen case studies have described CES member schools (often concealing the school's identity when the work sees print). Some report on individual schools; others analyze data across sites to draw more general conclusions.

Donna Muncey and Patrick McQuillan's School Ethnography Project, for instance, documented the consequences of reform efforts in eight early Essential schools from 1986 to 1991 and analyzed their common problems and characteristics. In contrast, the Coalition's School Change Study, led by researchers Patricia Wasley, Richard Clark, and Robert Hampel, produced 25 individual "snapshots" of five schools with whom research teams had worked for three years. The Muncey and McQuillan study lent an outsider's more distanced perspective on certain school reform issues: the Wasley process aimed both to study each school and simultaneously to support its change efforts.

Less formally, many teachers have begun to document and reflect on their own experiences in writing. The Annenberg Institute for School Reform is working with the National Writers Project and the Breadloaf School of English to encourage teachers to form action research teams and write up their findings. And increasingly, teachers' voices are showing up in regional and national publications affiliated with school reform.

Advances in communications technology, such as desktop publishing and cable TV, can also help schools publicize their work to their communities. The Coalition's series called *Performance*, which features individual schools' progress in

1,500-word articles intended for an audience of funders, the media, and the public at large, provides a useful model for such communication. Linda Quinn puts out a weekly "Direct Line" chronicling Puyallup High School's progress, as well as publishing an impressive annual report that lays out the larger picture. Mt. Everett Regional School in Sheffield, Massachusetts broadcasts a twice-weekly talk show on cable television to five surrounding communities. And the new Francis W. Parker Charter School in Fort Devens, Massachusetts publishes a regular newsletter describing its

efforts to implement a project-based integrated secondary curriculum.

To keep track of the perceptions and priorities of students, teachers, parents, and community members, many schools conduct periodic surveys of these groups. The National Study of School Evaluation in Schaumburg, Illinois customizes such inventories for schools in both English and Spanish, as well as tabulating and analyzing their results; the National Association of Secondary School Principals offers its own surveys and tabulation services. And many schools, such as Noble High School in Berwick, Maine,

# Uncommon Measures: A Different Kind of Data

Researcher Molly Schen has been working with the Coalition to develop new indicators with which schools might document progress toward implementing Essential School ideas. What follows are some suggestions for these "uncommon measures":

#### WHO ARE WE?

#### Percentage of students from single-parent homes

- Percentage of "latchkey" children
- Extent of student and family mobility
- Demographic history and projections
- Percentage of students from feeder schools with like philosophy
- Extent of K-12 feeder system

#### WHAT ARE WE DOING?

 Per-pupil expenditures on instruction and materials alone

Teacher-student load

- Percentage of teachers on teams with students in common
- Number of students per team
- Number of common planning periods / week
- Frequency of faculty meetings
- Percentage of students in activities; in community service
- Samples of assessment tasks
- Use of flexible room arrangements
- Classroom observations for higher-order thinking skills, percentage of teacher talk, etc.
- Number of library books checked out per student per year

# HOW ARE WE DOING?

- Samples of student work
- Percentage of parents at voluntary events
- Number and types of scholarships awarded
- Satisfaction surveys of students, teachers, parents, principal
- Percentage of students prepared for class with homework & materials
- Follow-up studies of graduates

# What Indicators Might an Essential School Follow?

The Illinois Alliance of Essential Schools compiled these categories to help member schools keep track of their progress toward putting Essential School ideas into practice. If schools agree on common ways to measure progress in these areas, the Alliance suggests, they can provide a consistent gauge of the nature and type of progress in individual schools and across the state. Clearly, such documentation takes time; most schools choose to document one category at a time over a period of several years.

#### I. SCHOOL STRUCTURE AND CLIMATE

- · Presence of a schoolwide decision-making group
- · Level of teacher involvement in decision-making
- · Level of student involvement in decision-making
- Level of parental and community involvement in school activities
- Level of school administrator's understanding of, involvement in, and commitment to the restructuring process
- Level of the teachers union's understanding of, involvement in, and commitment to the restructuring process
- Level of the business community's understanding of, involve ment in, and commitment to the restructuring process
- . Amount, kind, & quality of staff development opportunities

#### II. CLASSROOM INSTRUCTIONAL ACTIVITIES

- · Classroom observation (formal, informal, walk-throughs)
  - · presence of flexible room arrangements
  - display of student work
  - · levels of student participation
  - · levels of student-student interaction
  - · students working together
  - · students talking, questioning, discussing
  - levels of authentic learning (see Newmann et al. 1995)
  - · number of higher-order questions by teachers
  - · level of student-initiated responses
  - · ratio of teacher talk to student talk
  - · ratio of heterogeneous to homogeneous groups

#### III. CURRICULAR ACTIVITIES

- Curriculum mapping
  - presence of specific, high-order student outcomes for all grade levels and content areas
  - · appropriateness of texts and supplementary materials
  - · connection of assessment procedures to desired outcomes
  - connection of assessment procedures to texts and materials
  - Connection between desired outcomes, assessment tools, curricular materials, and instructional strategies (curricular linkage)
- · Organizational and structural aspects of curriculum
  - number of interdisciplinary units
  - · number of all-school projects
  - · frequency and nature of team-teaching
  - · frequency and nature of common planning time
  - extent of adaptation of school scheduling to curriculum and instructional efforts
  - teacher-pupil ratios

#### IV. STUDENT ASSESSMENT

- Development of a list of ideal graduate requirements
  - · approval/adoption of the list by the school board
  - approval/adoption of the list by the community

#### · Alternative assessment

- · presence of alternative assessment activities
- · authenticity of levels of alternative assessment activities
- · presence of appropriate assessment rubrics
- presence of multiple judges in performance and alternative assessment (tests of reliability)
- presence of student involvement in alternative assessment
- presence of accumulated performance assessment documentation (end-of-year portfolios; cross-year portfolios)
- progress toward graduation by exhibition
- ratio of paper-and-pencil tests to performances and exhibitions
- · Standardized assessment
  - ACT/SAT
  - · state exams in reading, writing, math, and science
  - locally or nationally developed standardized tests
- · External assessments
  - number of medals, honors, etc. awarded in academic competitions
  - number and types of scholarships awarded
  - number of students passing outside accreditation tests (union entrance, military placement)

# V. EQUITABLE ACCESS TO CURRICULUM AND INSTRUCTION

- · Presence of mainstreamed or included special needs students
- Level of de-tracking activity (honors classes, college-bound programs, career tracks, etc.)
- Presence of all-school, inclusive activities (school-wide projects, all-student seminars)
- Presence of high-order outcomes for all students

#### VI. AFFECTIVE CHANGES IN STAFF AND STUDENTS

- School-wide levels of decency and trust
- · Degree of openness to change
- Visible school pride
- Degree of student and staff involvement in school activities
- · Level of student involvement in community service
- · Levels of student self esteem
- · Levels and degree of teacher efficacy

#### VII. STUDENT DEMOGRAPHICS

- · Retention rates.
- Graduation rates
- Attendance figures
- Punctuality

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- Discipline referrals and suspension (in school and out)
- Student applications for school enrollment
- Percentage of students with minimum competency on basic skills

work with nearby university partners to devise and tabulate surveys based on their particular concerns.

All these forms of documenting school change reflect a wide array of voices and standpoints. The more diverse such efforts, the deeper and richer a picture emerges of just what a school has accomplished in its change efforts, and where it has yet to go. Some means of documentation necessarily duplicate or overlap each other; some represent more distanced, objective perspectives than others. As a result, new questions arise, new ways to seek answers emerge, and new goals can reflect the information schools have acquired.

#### What to Measure?

It helps if schools throughout the Coalition use similar measures to keep track of what they are doing. Comparing progress along the same indicators used by large empirical studies gives Essential schools added credibility when they argue their effectiveness. And agreeing en masse to follow alternative indicators allows the Coalition to exert considerable leverage as to what kinds of information large studies collect.

Toward this end CES researcher Molly Schen is preparing a list of "common" and "uncommon" measures that, taken together, can provide a multifaceted picture of school progress. (See pages 2 and 3.) Before collecting any such data, Schen notes, schools should think about how they might someday want to sort it (by gender, race, ethnicity, grade level, teams, or other variables), so they can obtain this information from the start. It makes sense as well to establish a baseline and gather the same data from year to year, and to budget time and effort on someone's part to collect it.

Rather than sampling successive cohorts of students for the same information, Schen and MacMullen recommend picking one group to follow throughout its Essential school experience. Unless student mobility is a major problem, this

technique reveals more about how changes work out; Noble High School, for example, showed substantial gains across the board for its class of 1995, the first to experience restructuring for all four high school years. Other schools, like Baltimore's Walbrook High School, also keep tabs on how student fare during the four years after graduation.

Essential schools have the particular task of charting progress by indicators that reflect their common beliefs. Ted Sizer's Nine Common Principles call for a dual focus on intellectual development and a sense of community; so to document its effectiveness, an Essential school must sort out clear ways to show that such a focus is developing.

In Illinois, the Alliance of Essential Schools offers seven categories of information that reflect the Nine Common Principles, so member

schools might keep track of their progress. (See page 4.) And in a more empirical and scholarly setting, a list of indicators for "restructuring practices" came in 1995 from a set of longitudinal studies conducted by the U.S. Department of Education's research center, which Fred Newmann directs at the University of Wisconsin.

That five-year research effort looked at the effects of restructuring on the achievement of a huge national sample of students through high school, and took a more intensive look at 24 schools (twelve of which were Coalition members). It identified specific areas of school organization that most affected student learning—in particular, the movement away from a bureaucratic or more traditional form of organization to a more communal one. It defined "authentic instruction" and

# Measuring the Strength of a Professional Community

Recent highly regarded studies from the Wisconsin Center for Educational Research have pointed to how strongly the presence of "professional community" affects authentic student achievement. In a professional community, researchers posited, teachers pursue a clear shared purpose for all students' learning, engage in collaborative work to achieve that purpose, and take collective responsibility for student learning. Coalition researcher Peggy MacMullen has drawn on that perspective, using these questions as a basis for school people to use in documenting their progress:

#### **Common Purpose and Activities**

- Can teachers describe our mission?
- · Have we a common core of courses?

#### Collaborative Activity

- How many collaborative work structures (e.g., teacher teams, study groups, interdisciplinary courses) have we?
- What percentage of teachers are on teams with students in common? In study groups? What percentage teach interdisciplinary courses?
- How frequently do teams, study groups, faculty, and so forth meet?
- How much time during the school day is allocated to collaboration?
- · What is the teacher-student load?

#### Collective Responsibility

- What percentage of teachers believe all students are capable of high levels
  of learning?
- What percentage of teachers believe that they have significant control over how much students learn?
- How close are teachers' personal beliefs to the vision we have established for the school?
- To what extent does everyone continually hold their practice up to a guiding vision? To what extent is that vision deepened by examining practice?

# In California, Portfolios of Whole-School Progress

California asks all schools involved in its School Restructuring Initiative to continually document their progress toward four key goals: developing liabits of inquiry through examining student work; impacting the whole school in that process; addressing the learning needs of every student; and engaging the district in their effort. Schools do this all year long (for several years), compiling a School Portfolio in which they provide evidence of regular critical looks (which they call "protocols") at student work, and receiving visits from "critical friends" who provide feedback. At the end of each year they send a team to a statewide symposium at which they analyze their progress, using the following questions:

 What actions did your school take and why? (These are linked to previous inquiry processes.)

 How did your school use the examination of student work to judge what impact these actions are having on students? How were students and their parents involved in this examination? Who else was involved?

 What inquiry processes did you use to collect other data and information to see what impact these actions are having?

What happened as a results of the actions you took?

· Whose assessment is this? Who might disagree?

· Where is your school community now in relation to the four goals?

What feedback did you get from the visitation process and how was it used?

 What student work and other data did you examine? Share a few examples; and share how you analyzed the data.

· What other evidence might you need, and why?

· What were the standards by which the work and data were examined?

· What things are not working in making progress toward the four goals?

· What things are working?

· What questions or insights do you have that will guide your next steps?

linked it definitively to improved student achievement. And it demonstrated that the positive effects of restructuring show up equitably across lines of race, ethnicity, and socioeconomic status.

In setting out clear constructs by which to measure the elements of school restructuring, the Wisconsin Center added scholarly weight to the efforts of Essential schools whose practices can be similarly defined. Its studies defined and made measurable many things Essential schools care about; and its coldly empirical findings seem clearly to justify and suppose the effectiveness of Essential school principles.

# **Documenting Thoughtfulness**

Intellectual quality in the classroom, Fred Newmann and his colleagues concluded, mattered even more to student achievement than innovative organizational structures, techniques, or procedures. But exactly how does one document thoughtful teaching and learning in a school that has declared intellectual focus to be a top priority? What "indicators" of thoughtfulness exist, and how can schools follow them?

Newmann answered by developing definitions and standards for "authentic" instruction, assessment, and student work and a scoring method with which faculty could document its presence in each other's classrooms. His 1995 Guide to Authentic Instruction and Assessment helps teachers use these standards to assess and improve their schools' intellectual focus.

Researchers Tom McGreal and Marci Dodds, working with the Illinois Alliance of Essential Schools, suggested such indicators as the ratio of paper and pencil tests to performances and exhibitions, the ratio of teacher talk to student talk in classrooms, and the ratio of heterogeneous to homogeneous groups. An increasing number of Essential schools are using the "tuning protocol" that loseph McDonald and David Allen devised as a way of assessing the quality of student exhibitions, and Allen is publishing several other such protocols in a forthcoming book. "These measures may not lend themselves to large aggregated databases for comparative information," says Peggy MacMullen, "but networks of schools could certainly use the same measures and study the results together."

Along the same lines, how can Essential schools document their growing sense of community? A shared commitment to common beliefs and principles leads unequivocally to higher student achievement, recent research by University of Chicago sociologist Anthony Bryk and others has shown. Keeping track of whether the adults in a school share values, a common agenda of

# Some Ways to Document Change in Schools

- Data describing common and uncommon measures
- Surveys of teachers, students, administrators, and community
- Classroom observations using commonly held rubrics for authentic teaching and learning
- Public exhibitions of student work
- Compilations of student work to illustrate different performance levels
- School portfolios
- School quality review teams
- "Tuning protocols" examining student work
- · Curriculum materials
- Budget information and analyses
- Follow-up studies of graduates
- Newsletters
- Teacher writings
- Cable TV and/or radio broadcasts
- Student publications
- Discussion or study groups

activities, and a collegial pattern of relations can shed meaningful light on a school's improvement. The presence of such "professional community," as some researchers call it, can be followed through focus groups, "cognitive maps," or surveys, as well as by tracking the kinds of practices that indicate it.

### Making Research Live

Solid research puts steady legs under a school reform effort, but it can also breathe life into a school's work. By broadening a community's understanding, Bryk reminds us, ongoing research can catalyze new ideas, signal problem areas, offer conceptual frames in which to discuss issues, provide useful information for brainstorming about possible solutions.

One intriguing approach that supports these aims involves compiling an "inventory of assets" that a school community commands in its quest for improvement. Conceived as a community development tool by researchers at Northwestern University, it is being tried out at the Memphis site of the ATLAS Communities Project, a consortium funded by the New American Schools Development Corporation (NASIX:) and jointly developed by the Coalition of Essential Schools, Harvard University's Project Zero, Yale's School Development Program, and Education Development Center.

"When we gather information on a school's resources, we're going beyond data collection," says Ron Walker, a leadership coordinator for Memphis. "No matter how impoverished the community, everyone in it has skills and expertise that can support the work of the school. This replaces the deficit model of improving schools with information about our assets, so we can define and solve our problems together."

With the same aim of folding accountability into action, California asks schools in its state restructuring initiative to participate in an ongoing self-review process. "We build the system around reviewing real kids and their work," says Steven Jubb, a director at the state Center for School Restructuring. "Data like standardized test scores are just not rich enough to make the link between teaching strategies and the work kids do." Schools also host visits from "critical friends" and prepare a portfolio that demonstrates their progress using a common performance rubric. (See page 6.)

New York's New Compact for Learning has undertaken similar work in its School Quality Review Initiative, a two-part process of self-study and "external" review that takes place in a five-year cycle. An internal review team involves the whole faculty in a four-year assessment of teaching and learning, and prepares a school portfolio to document its collective perspective, questions, and expectations. And a team of teachers and administrators from other districts as well as parents and community members visits the

school for an intensive week of observation, interviews, and looking at student work, and writes a report to the staff. The upshot is a faculty-generated plan of action aimed at continuous improvement and at a "culture of ongoing review."

In the end, any documentation effort worth its salt will put good questions at its center, answering them with as many different kinds of evidence as possible. At the level closest to students, it will seek out evidence that kids are engaged in meaningful work and experiences. At the district and state levels, it will look for policies and spending decisions that support schools' capacity to make changes and provide equitable opportunities for student learning. The synergy among these factors complicates the task of documenting school progress, but it also keeps it honest. The messy, living process of changing an organization may not submit to review in any less messy, living way.

# Tips for Presenting Your School to the Public

- 1. Show value added. A one-shot look at any measurement—whether test scores, student work, or college admissions rates—necessarily misrepresents your program. To give a more accurate picture, always describe the point your school is working from, and progress you have made toward a particular goal or standard.
- 2. Juxtapose all test score data with other relevant data. Wherever possible, "triangulate" your data—for example, present findings about student learning outcomes alongside information about students' attitudes toward school and data about demographics or socioeconomic status. To prevent inaccurate generalizations, aggregate or sub-aggregate information to make clear which students it represents, and make sure comparisons are fair among student groups and jurisdictions. (Are these the same students represented by earlier data, for example?) Provide plenty of context, even to the point of graphically linking test data to contextual information so it can't be reproduced in isolation.
- 3. Use simple language. Describe your progress in honest, clear terms that anyone can understand. When presenting statistical data, use charts or graphs; when talking about more holistic concepts (such as "active learning") use examples: a videotape, a sample piece of student work, what students and parents say about the meaning or importance of their work. Publish your rubrics for performance assessment and compile a collection of examples of work at each level, to give parents and outsiders a clear picture of what your standards look like in practice.
- 4. Ask parents and community members to present your progress. They are the critical audience you want to reach and they know best what to include. Purposely ask critics of the program to help communicate what's good about your school in an honest and forthright way.

# More Information and Readings on Documenting School Change

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