# 1

# Using Data for Alignment and Achievement

"**W**ell, lady, there's good news and bad news. Which do you want first?"

This was not the opening line of a comedian. It was the greeting of the mechanic as he returned from the service bay of the dealership where I had purchased my still-pretty-new red sports car. I asked for the bad news first. "You're going to need four new tires, and the high-performance type you have are not included in the special sale we're running. You also need your front end aligned and your brake pads are nearly shot. You're looking at right around a grand altogether."

My treat-the-mechanic-nice-or-it-will-only-get-worse smile faded as my heart sank and my stomach somersaulted. I could see my little vacation nest egg fading before my eyes. "So what could possibly be the good news?"

I wished I hadn't asked. It was all the spark he needed to fire up a lecture that seemed prerecorded for female customers. "Lady, the good news is that you're alive. I can't figure out why you women can't seem to grasp the importance of basic routine maintenance. You hit something or something hit you and knocked that front end out of line, and instead of getting it checked and fixed right away, you just let it go on and on until your tires are worn all uneven and the right front one could have blown out any time and put you into a skid or a rollover, and with your brake drums affected, too, you'd have a mighty hard time driving your way out of it. Anybody who'd neglect a car like this shouldn't be allowed to have one in the first

place. Didn't anyone ever tell you the number one rule of owning a car? Take good care of your car and it will take good care of you! You're just lucky you got in here when you did!"

What an embarrassing, expensive experience for someone who uses the word *alignment* almost daily in her organizational development work! There's no way to calculate the number of school improvement/reform/ restructuring/transformation efforts that have gone out of control, rolled over, or skidded to a stop due to lack of alignment. Well-intended but misaligned efforts result in disillusioned educators who resolve, "Never again," disappointed constituents who wonder, "Why can't they get their act together?" and disengaged or disenfranchised students moving through a system of public education without having truly learned.

Figure 1.1, Using Data for Alignment and Achievement, illustrates the relationships that must be in alignment so that investments of human and fiscal resources will pay the dividends of improved student achievement. This figure is a composite of the key components of a variety of change processes used in school districts I have known: Effective Schools models, school accreditation processes, total quality management, strategic planning, and, most recently, school improvement plans required by state accountability systems and demanded by No Child Left Behind, the reauthorization of the Elementary and Secondary Education Act (www.ed.gov/offices/OESE/esea). I have frequently seen one or two of these components done well; however, I have rarely seen a fully aligned system. But I have observed that the districts with the most tightly aligned and data-driven approaches to change and improvement are also those making a difference in student achievement.

The visual organizer of an aligned achievement plan appears twice in this chapter. First, we explore the relationships among the components; then, we describe the essential uses of data at critical points in the school improvement process (Figure 1.2). Scenarios from two high schools are provided as example and nonexample so readers can gain further under- standing by comparing and contrasting their approaches to change.

## Alignment Between
## Mission and the School Portfolio

The literature on change is full of materials that stress the importance of an organization having a statement or document that articulates its "passion"—the core values and purposes that guide it. Few authors describe the mission as a set of commitments for which the organization is accountable. The vertical arrow between the *Mission* and the *School Portfolio* in Figure 1.1 demonstrates the need to provide evidence that the mission is being fulfilled.

The term *school portfolio* is used here to describe a collection of data compiled at the individual school level. Chapters 6 and 7 discuss the con- tents and format of the portfolio. Although it is frequently referred to as a

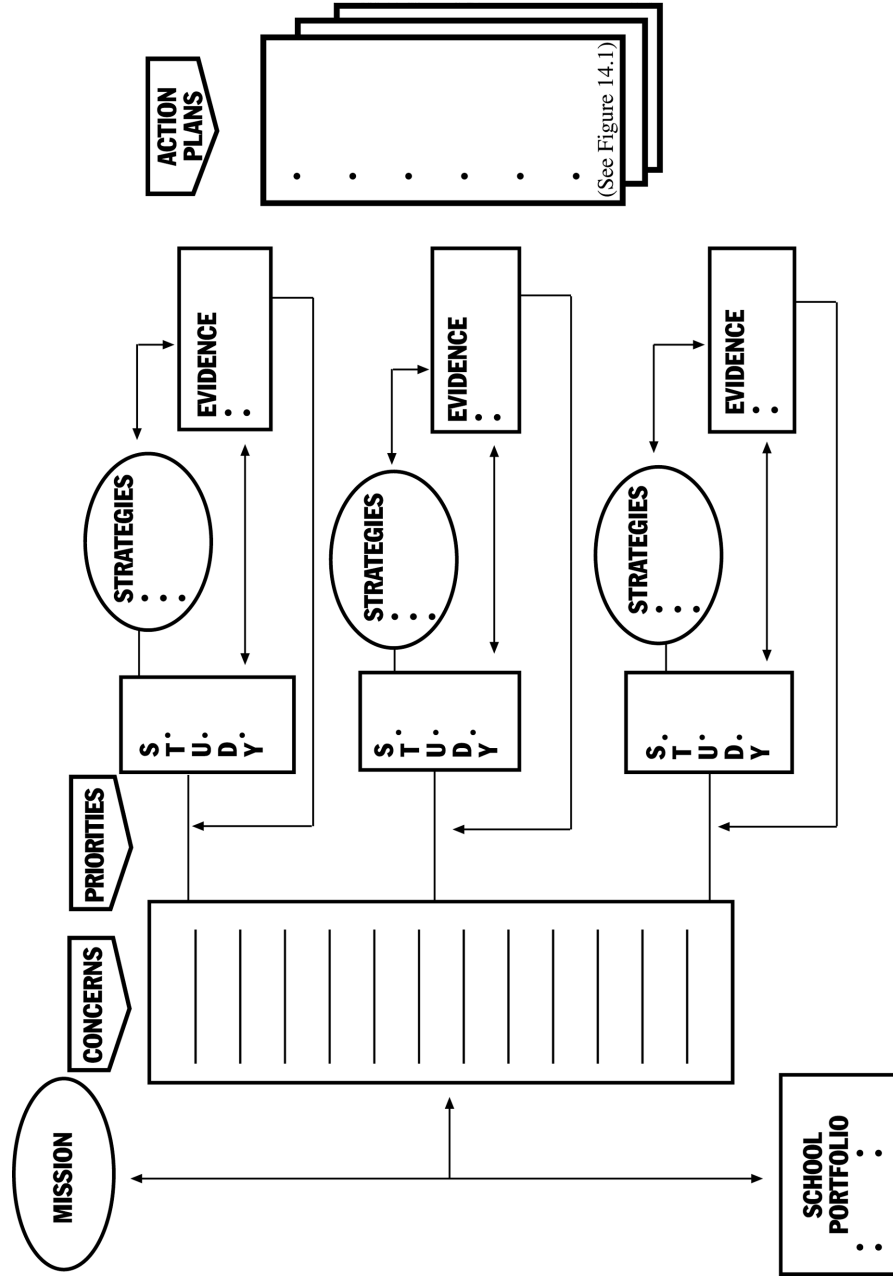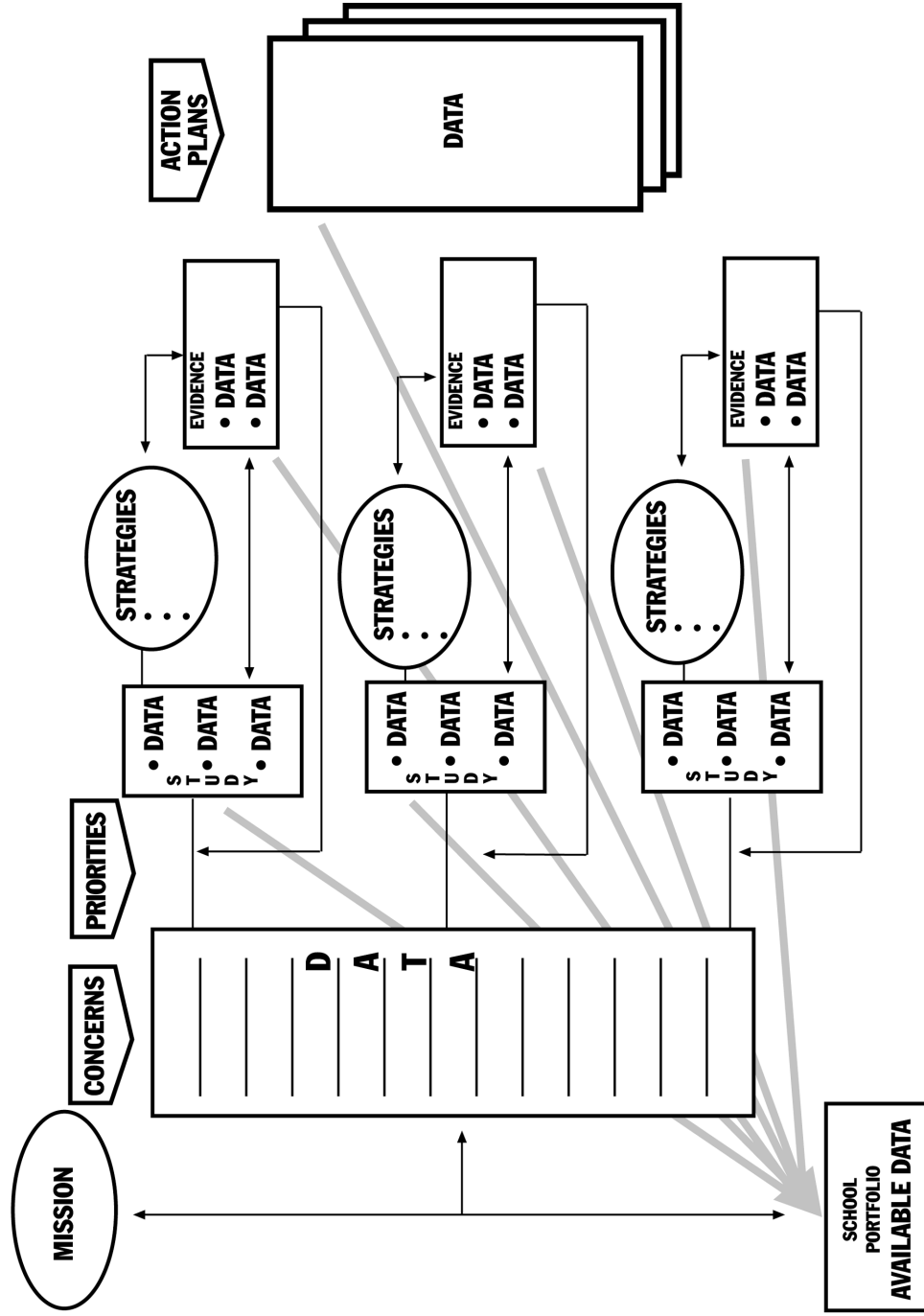**Figure 1.1** Using Data for Alignment and Achievement

**4**

**Figure 1.2**    Aligning the Achievement Plan

*profile,* I prefer to call it a school portfolio for three reasons. First, I believe that the comparison to a portfolio of student work is a very fitting reminder that we work in a school context. Second, the term *portfolio* is apt because a student's (or artist's) portfolio is intended to demonstrate three important aspects of his or her work: the range of skills, the very best final products, and artifacts that provide evidence of progress and learning. A school also needs to present the wide variety of needs it addresses, examples of success to celebrate, and evidence of improvement occurring where needed.

Third, I believe one of the reasons school-level data should be compiled as a portfolio is to paint a more complete picture of the uniqueness of that school and its students than the term *profile* implies. Painting a picture requires more than an outline or silhouette. This is not to say that a school portfolio should be a two-ton tome. Chapter 6 will emphasize the need to be intentional about the portfolio's contents, so staff and constituents are not overwhelmed and intimidated by sheer volume.

The relationship between the mission and the school portfolio is that one should provide evidence of the other. In organizational development terminology, it is looking for alignment between our *espoused theories* (beliefs) and our *theories in use* (how we operate on a daily basis); (Argyris & Schon, 1974). When we provide evidence of what we do, how closely does it match what we say? Our integrity is judged by whether we do what we say we will do.

## Alignment Between Mission, Portfolio, and Concerns

The length of the vertical arrow between **Mission** and **Portfolio** in Figure 1.1 represents the amount of discrepancy between rhetoric and reality. Awareness of this discrepancy should generate a range of concerns, which Peter Senge (1990) might describe as "creative tension." The horizontal arrow emphasizes that the **Concerns** we begin to address should arise directly from the values we hold dear and the data we examine courageously. In Chapter 10, this list of concerns is also prompted by the question, "What are *all* the things that *anyone* might say *could* be improved in our school?" This inclusive question reminds us that the school portfolio should contain perceptual data from the constituencies that have a major stake in the school: staff, students, and parents.

## Alignment Between Concerns and Priorities

If our school portfolio includes a variety of data from a range of sources, many concerns will be identified (see Chapter 6). Only a few can be

addressed with the type of substantive, systemic effort needed to change student achievement. The contrast between the many lines in the *Concerns* box and only three spaces for *Priorities* in Figure 1.1 represents the need to focus on a few areas of critical importance and major impact on student achievement. Chapter 10 emphasizes how and why this is so important.

## Alignment Between Priorities, Study, and Strategies

Too often, participants in a school improvement process have unrealistic time expectations placed on them. They may be asked to set new annual goals each year and be given just a day to go on retreat and develop the improvement plan. This model yields several unintended, undesired consequences. Significant needs are not addressed as goals because they can't be attained in one year. Strategies for meeting the goals are brainstormed based on the particular experiences and preferences of the group. Important factors in the local context that would inform these decisions are ignored.

The three bullets in the *Study* component of Figure 1.1 emphasize the necessity for deeper analysis of the data, thorough examination of research and best practice, and honest analysis of existing practices within the school. Annual plans must be replaced by multiyear plans, with months of planning time provided for thorough work and adequate engagement of those who will be affected by coming changes. The strategies selected for implementation must be consistent with the school's mission, linked to needs arising from data, and proven effective in other settings.

It is important to note that there are three bullet points in the oval labeled *Strategies*. These bullets do not represent three specific tasks, as the three bullets in the *Study* box do. Rather, they serve as a reminder that there is no "silver bullet" or "magic potion/program" that can solve a complex problem. A powerful combination of effective strategies must be created and coordinated.

## Alignment Between Priorities, Strategies, and Evidence

Traditional methods of program evaluation and school improvement have claimed success by reporting evidence that selected strategies were implemented. Glowing accounts are provided of the number of teachers who attended training and the number of new initiatives begun. One reason we so often reported what the adults did, rather than the results achieved for students, is that this is what we *knew how to do*. Individual teachers kept track of students' progress in idiosyncratic ways at the classroom level, but there was little assurance that this data matched schoolwide goals or could be aggregated to show student progress for the school as a whole.

As Figure 2.2 indicates, high-performing schools identify formative assessments they will use to monitor students in a more frequent, more authentic, and less threatening way than the large-scale assessments they also administer and analyze. The two bullet points in the *Evidence* component of Figure 1.1 represent the need to verify *implementation* of the selected strategies and to ensure that this effort has an *impact* on student learning.

The arrows that go back-and-forth and around *Priorities, Strategies,* and *Evidence* in Figure 1.1 illustrate that this activity is cyclical, continuous, ongoing work. The process is not as straightforward as the two-dimensional confines of print make it appear: For example, the two-way arrow between *Strategies* and *Evidence* reminds us that determining what evidence we need and learning how to gather it will also inform what we need to do as strategies so the evidence we seek will be available. When I work with planning groups, it is a challenge to restrain them from making decisions about strategies until they have a good idea of what goal attainment would look like and how that would be documented.

## Alignment Between Strategies, Evidence, and Action Plans

The components of *Mission*, *School Portfolio*, *Priorities*, *Strategies*, and *Evidence* in Figure 1.1 represent the major components of the achievement plan. They signal major decisions about what the school's focus will be, what new work the school will initiate, and how the school will determine its effectiveness. This overall "plan at a glance" can be displayed, publicized, and referred to frequently. The big-picture view helps keep leaders, staff, and stakeholders grounded when multiple efforts seem overwhelming and may feel that they are starting to spin out of control.

The achievement plan describes "why" (mission and portfolio), "what" (goals), and "how" (strategies and evidence). But when it comes to putting all this work into place, the devil is in the details. School leaders need more specific, concrete *action plans* to identify "who," "when," "where," and "with what funding." Chapter 15 provides guidance for planning the new work. Figure 15.1 is an example of an action plan. The *Action Plan* blocks on Figures 1.1 and 1.2 are a reminder that more detailed planning is needed to ensure implementation of the strategies that were selected and collection of the needed evidence to document success.

## Consolidating Multiple and Existing Plans

For a Summer Institute in 1999, our state department of education created a list of possible plans and/or grants currently in place, including the 46 possibilities shown in Figure 1.3. The list may be shorter now, since

**Figure 1.3** Possible Plans Already in Place

<u>**Building-Level Plans**</u>
- Accreditation/Self-Study
- Crisis Response
- Safety Procedures
- Reading Improvement Plans

<u>**Grants**</u>
- Goals 2000
- State Technology Grant
- Technology Literacy Challenge Fund
- School-to-Work
- Readiness to Learn
- Comprehensive School Reform Designs
- School Security Enhancement
- Washington Reading Corps
- K-2 Professional Development
- Community Network
- 21st Century Community Schools

<u>**District-Level Plans**</u>
- Strategic Plan
- Assessment Plan
- Transportation
- Facilities
- Asbestos Management
- Budget Development
- Crisis Plan
- Safety Plan
- Staff Development Plans

<u>**State-Mandated Plans**</u>
- K–4 Reading Improvement Goals
- Student Learning Improvement
- Technology
- Learning Assistance Program
- State Transitional Bilingual Education
- Highly Capable

<u>**Federally Mandated Plans**</u>
- Even Start
- Title I—Schoolwide
- Title II—Targeted Assistance
- Title II—Eisenhower Professional Development
- Title IV—Safe and Drug Free Schools
- Title IV—Learn and Serve America
- Title IV—Compliance
- Title VI—Innovative Education
- Title IX—Gender Equity
- Carl Perkins—Vocational and Applied Ed.
- Emergency Immigrant
- Homeless Education
- Individuals With Disabilities Education Act
- Migrant Education
- Americans With Disabilities Act
- Class-Size Reduction
- School-to-Work

funding for some of those plans has been cut in this time of reduced resources for public education. Some of the plans on the list may not apply in your location. It is, however, highly likely that your school is implicated in and accountable for a multiplicity of plans—some you may not be aware of. This list provides a starting point for your quest.

Questions to be asked as you begin work include the following:

- How many plans are there?
- Where are they?
- What do they require of us?
- Is the school the major focus or is the primary activity and responsibility a function of the district? (See Chapter 13)

Plans that clearly fall within the scope of the school context need to be reviewed and aligned wherever possible within the achievement plan

illustrated in Figure 1.1. For example, the existence of a reading improvement plan mandated by the state to the district indicates that one priority area has already been identified as reading, and this priority probably includes some strategies that have already been selected for implementation. These should be reflected in the school's aligned achievement plan, rather than being housed in a separate place and creating the probability that the school will add more strategies, with the potential for overload and fragmentation. In other cases, the existing plan may be a thorough, complete, well-aligned action plan (see Figure 14.1 in Chapter 14). This existing action plan would be integrated into the overall achievement plan by listing its major strategy or strategies on Figure 1.1 and then linking it to the priorities it addresses.

# Using Data for Alignment and Achievement

The auto mechanic who worked on my car had a computer and a number of other tools he used to align my front end and get my wheels back in balance. The tool for aligning our efforts to increase student achievement is data. In Figure 1.2, the critical points for use of data are superimposed on the basic diagram from Figure 1.1. The initial version of the school portfolio is clarified as baseline data. Shaded arrows have been added to illustrate how the school portfolio continually expands as more data are acquired and used throughout the process. These arrows show how the regular use of data changes the appearance of a linear process into a continuous improvement cycle.

## Data for Initial Review

When most schools make the commitment to become more data-driven, they are panic-stricken about where they are going to find information to include. Then, they discover that there are "mother lodes" of data scattered throughout the school and district that have been as shrouded with mystery as the lost ark and certainly have never been mined. Once people begin to discover what they *can* include in the initial school portfolio, it becomes a challenge to limit its size and scope. Chapter 6 provides ideas for organizing the school portfolio and the shaded arrows on Figure 1.2 illustrate why organization is so essential. Because the school portfolio is a work in progress at all times, there will be ample opportunities to add more information or more detailed analysis as the process continues.

## Data to Focus Priorities

The data compiled in the school portfolio will be used as one of three filters to help the school focus on a limited number of priority areas for

attention. Chapter 10 describes the critical importance of an objective look at how severe an issue is, as well as its connection to the values of the school and the ability of the school to change it. Using data at this point is also critical for another reason. It establishes awareness that the school portfolio is not just a product to be "finished and done with," but a work-in-progress will be consulted regularly whenever decisions are pending.

### Data From Further Study

The three bullets in the *Study* box of Figure 1.2 represent further analysis of the data related to each priority issue or need, investigation of best practices, and review of current programs and instructional practices. When new strategies are being considered, data that substantiate their claims of effectiveness should be a prerequisite. Data on current practice might include documenting the amount of time each teacher devotes to an essential skill or standard. The shaded arrow shows how these data become part of the school portfolio as it is continually updated.

### Data for Documenting Results

As improvement goals are crafted into language that will motivate a whole-school effort, the question, "How will we know we're getting there?" should be addressed. Some answers will be very evident, because there are data sources that were available earlier and used in the initial school portfolio—and these can be monitored over time. Standardized tests and state assessments are two examples. Other answers will have to be constructed as professionals discuss what could be measured, observed, or aggregated from information they already keep as individual teachers. Chapter 14 provides examples of data used to document implementation and impact in actual schools.

### Plans for Collecting Data

A school's completed version of Figure 1.1 identifies the data that will be used to document progress. Some of this will be test data that automatically comes from the state to the district and on to the school. Other data will be school-specific and must be intentionally collected. The plans for this data collection should be embedded in the action plans. For example, refer to Figure 14.2, which identifies artifacts that would be collected and graphs that would be created to demonstrate the implementation and impact of a monitoring program for chronic absentees. One reason we end up with little to show for our efforts is that we don't plan ahead and take the action needed to get the proof we will want to present.

# Two Schools Implement a Major Change

The program at a recent conference on high school reform included a strand devoted to block scheduling. There were "how *to*" sessions—how to vary instructional strategies in the longer time frame, how to develop the master schedule, and so forth. There were also "how *we*" sessions—sessions offered by principals and teachers to describe their various approaches, challenges, and solutions to the problems of this new design.

Because I was working closely with a high school at the time, I wanted to select some successful sites for them to visit. My data gathering involved seeking out these principal-presenters in the hallways, during lunch and in the evening, so I could privately ask them a few questions. The stories of School A and School B illustrate the range of responses I heard. The focus for the reader should not be the specific innovation of block scheduling, and the reader must temporarily suspend personal bias on that specific topic. The scenarios should be read with a focus on the change process itself. How are the components of Figure 1.1 and the data uses of Figure 1.2 revealed (or not) in these two approaches to change?

## School A

*Author*:       Hi. I see from the program that you're doing block scheduling at your school. How long have you been at it?

*Principal A*:   Well, it's about a year and a half now. We're into our second year of it.

*Author*:       Why did you make that kind of a change?

*Principal A*:   Well, I'm sure you've heard of our school. Our district is known as one of the most progressive in the state and our board likes to be sure we're on the cutting edge. The superintendent called me in one day and said that the board members were getting on his case because the elementary schools were doing multiage and looping and stuff like that, and the middle schools had these new "houses"—whatever they are—and they wanted to know what we're going to do for restructuring at the high school. So, we did some checking around and went to a national conference, and block scheduling seemed to be the thing that's "hot." So, we came back and started to work on it.

*Author*:       Did you run into any resistance? How did you go about implementing such a change?

*Principal A*:   Well, there were already enough schools doing it that I could call around and find out what the problems seemed to be. A couple of things they all mentioned were the hassles of getting the master schedule put together and trying to explain

the whole thing to parents who just had images of the way high school was back when they went to school. So, we decided we'd head off the resistance by just dealing with those right off the bat. I took my department heads to my cabin for a retreat for a couple days right after school got out, and we worked out the master schedule. That way, it would be all in place for teachers when they came back in August, and we wouldn't have to spend weeks worth of meetings trying to iron it out. We did the best we could to make people happy, but we knew there's just no way to please them all. And on the parent thing, I've got a good friend with kids in the school who runs a public relations firm. He volunteered the time to make up a brochure that we could send to all the parents in early August and give them fair warning so they could get used to the idea. It's a good thing I work year-round, because there sure were a lot of people calling in to ask me about it.

*Author*:    Is it working for you? How do you know?

*Principal A*:    Well, like I said, we're in our second year. We had a lot of glitches and some people didn't like it at first—but we just stuck to it and we made it through. The board was real supportive that we wouldn't just give up after one year. And it must be good for the kids. Last week, my assistant principal was getting ready to throw out some old referral slips when he noticed there were only about half as many hallway disciplines as the year before. So, obviously we're doing something right.

## School B

*Author*:    Hi. I see from the program that you're doing block scheduling at your school. How long have you been at it?

*Principal B*:    Well, I guess there's two ways I could answer that. If you mean how long we've been using it, I'd say two years. This is our third year. But if you mean how long we've been *working* at it, I'd say three years, because I'd count the year we spent making up our minds and getting ready for it.

*Author*:    Why did you make that kind of a change?

*Principal B*:    Well, now you're in for a longer answer, if you have time. It seems simple at first. We were getting ready for the accreditation people to do a site visit, and we were checking off the stuff they look for—like a mission statement, for example. We remembered we had one from the last time around, and we got it out to review. We actually liked it and decided to keep it, but as we were talking about it, we sort of wondered if it

was for real or not. We had things like "critical thinking" and "problem solving" and "having a caring, personal community" in there, but we really hadn't been thinking about whether they were true. So, we decided to make those three things a real priority in the next couple of years. Then we had to get data together—you know, they want a school profile. And we got to wondering if maybe we could find out about critical thinking and problem solving and caring community from stuff in there. Well, we checked, and we didn't like it. On test score measures of problem solving, we weren't very good. When we had teacher focus groups, people were complaining about the poor quality of written work and the shallow answers in class discussions. When we looked at survey data from the students and parents, we were disappointed at how many didn't agree that they had two or three adults to turn to with problems or didn't agree that the school treats each student as an individual, and so on. We started asking "why not," and eventually decided that it's pretty hard to teach to high levels of Bloom's taxonomy and get quality work in 42-minute periods—and pretty hard to know kids as individuals with 170 different faces in front of you every day. That's when we realized that our own structure was keeping us from meeting our goals, and we decided to change it.

*Author*: Did you run into any resistance? How did you go about implementing such a change?

*Principal B*: That's a long story, too. We knew we could never make everyone happy, but we wanted to be sure that everyone got to be heard. So we decided to devote two months for study of the various problems and to put everyone on a study group. And we weren't just random about it either. My leadership team and I looked over the staff list, and thought about each person and what might trouble them—like, the math teachers are going to worry about continuity and the PE teachers are going to worry about sports. So, we put them on the group that would deal with their issue, and made sure each group also had some people who were real excited and optimistic. We gradually worked through the issues until we got a schedule that everyone agreed was the best we could do—not their personal best, but overall best. And while the teachers were working, we also had a couple of groups of parents and community members raising their questions and getting ideas and reactions from the people they knew. It helped us decide about communication strategies and gave us some advocates out in the town. Anyway, when school got out for the summer, we had all the plans in place and we had structured our August staff development days as a preparation.

> We had three days where experts gave us content in the
> morning, and then we met as departments in the afternoon
> and the experts helped teachers restructure their instruc-
> tional units for September with a variety of teaching strate-
> gies. That way, the teachers were ready to go and knew how
> to modify their lessons as the year went on.

*Author*:     Is it working for you? How do you know?

*Principal B*:  Well, for one thing, we have some new binders in the cur-
> riculum office that show how we changed our course syllabi,
> and we have some sample lesson plans. That's been really
> helpful for new teachers coming in, and proves we really
> did follow through on the changes in instruction. And then,
> last spring, we did the same surveys as three years ago. The
> students and parents sure gave us better ratings for person-
> alization and caring. And our test scores are up across the
> board—so, I guess our emphasis on higher-level thinking
> and sticking to our standards for quality work has really paid
> off. I think you'd have a real tough time getting this crowd to
> go back to the old way.

## Two A's and Three Powerful P's

This chapter introduced Figures 1.1 and 1.2 to illustrate the two A's of using
data: *alignment* and *achievement*. School A had no sense of mission unless it
was "to be progressive" and no particular priorities except perhaps to
"keep the school board happy." At no time did they review their achieve-
ment data or use it to guide their planning or to analyze their effectiveness.
School B, on the other hand, started with a sense of mission, tested it
against the reality shown in their data, established priorities based on the
evidence, and aligned their efforts with student achievement in mind.

The subtitle of the book captures three powerful P's that were also
present at School B. Their approach to change engaged the *people* who
would be affected by change and responded to the voices of the students
expressed through the surveys. They acknowledged and tapped the *pas-
sion* of individual staff members and gave them opportunities to be heard
and to influence decisions. And, when this group gave their conference
presentation, they were clearly excited about their data, as they displayed
the *proof* of their efforts in pre- and post-test scores and survey results.

## Making It Public

Schools that stand out in my mind have made their change process and
data work transparent. For example, some have enlarged Figure 1.1 to
poster size and used it as a worksheet to guide their planning year.

One school filled a huge bulletin board in its foyer with the components from Figure 1.2. Staff members created a beautiful poster of their mission statement and displayed it on the top left corner of the bulletin board. In the lower left corner, they posted the executive summary of their conclusions from analysis of the data in their school portfolio. The priority goals they set were lettered in calligraphy on sentence strips. Strategies for each goal were connected by strings of yarn, which gave them the ability to connect several strategies to more than one goal area. Their combined master plan was illustrated with a series of laminated monthly calendars that highlighted the events from their action plans.

Any visitor to this school knew what was happening and why. Any new idea or grant opportunity had to pass the acid test of proving where it would fit on that crowded, colorful bulletin board.

Schools with many existing plans or initiatives already underway have started "in the middle" of Figure 1.1, filling in the strategies they had adopted and backtracking to check alignment with questions such as the following:

- What goals were we trying to meet with this?
- How carefully did we research this program?
- What data established the need for this and will provide evidence of its success?
- Is it consistent with the values stated in our mission?

Future chapters in this book will include other suggestions for communicating about the data work and keeping it visible. Communication and visibility are powerful ways to engage staff and stakeholders, and transparency reduces the anxiety of those who may wonder what the data work is revealing.

## On the Road Again

My tires are now replaced and balanced, my front end is aligned, and my car is tracking straight down the road. If the components of school improvement are aligned with data, the school should also be able to move ahead and see its forward progress. In the next two chapters, we'll explore how the use of data is becoming more and more essential and why it is so hard to "get excited about" the use of data.