

## CHAPTER 1

# School Improvement Planning

Societies in the developed world at the beginning of the 21st century are complex and make many demands of their citizens. In the last 100 years, we have moved from an agricultural society, where 95 percent of the population worked and lived on farms; through an industrial age where the majority of work centered on heavy production; to an urban, technological society, where 95 percent of the population lives in urban or suburban centers and where most work is in service-oriented jobs. These wrenching changes in society necessitate great and continuing changes in the way we educate productive citizens, and the best way a principal and his or her school can keep up with these changes is through data-driven decision making.

While the relative isolation and economic independence of the farm has been replaced by the interdependence of urban living, the same process has been going on internationally: the economic independence of individual countries has been replaced by a web of global economic interdependence. Relatively highly paid workforces in the developed world cannot now compete with the lower labor costs of developing countries for manual labor jobs; those in the developed world must be ever more

skilled to maintain a competitive edge. Employment, especially in the developed world, requires higher level thinking skills: Even the most menial job requires some sophistication in reading and in many aspects of mathematics. In a school setting, this means that principals and their staffs must constantly collect and use data to ensure that students are developing needed skills.

The Conference Board of Canada's Employability Skills Forum together with the Business and Education Forum on Science, Technology, and Mathematics gathered input from over 50 members representing business, government, and education and released, in May 2000, *Employability Skills 2000+*, "the critical skills you need in the workplace—whether you are self-employed or working for others" ("Apply Your Employability Skills at Work"). This document takes the increasingly complex skill set demanded by employers and breaks it into three parts:

### **Fundamental Skills**

- Communicate
- Manage information
- Use numbers
- Think and solve problems

### **Personal Management Skills**

- Demonstrate positive attitudes and behaviors
- Be responsible
- Be adaptable
- Learn continuously
- Work safely

### **Teamwork Skills**

- Work with others
- Participate in projects and tasks

Similarly, the Partnership for 21st Century Skills, a consortium of 31 high-profile American companies, issued a *Framework for 21st Century Learning* in 2007. The Partnership begins by stating that, although mastery of core subjects (defined as including English, reading or language arts, world languages, arts, mathematics, economics, science, geography, history, and government and civics) is

essential for students, the following 21st-century interdisciplinary themes must be interwoven within those core subjects:

- Global awareness
- Financial, economic, business, and entrepreneurial literacy
- Civic literacy
- Health literacy

The Partnership goes on to list the learning and innovation skills it believes will characterize students who are prepared for increasingly complex life and work environments in the future. Those skills include the following:

- Creativity and innovation
- Thinking skills and problem solving
- Communication and collaboration

It also lists the information, media, and technology skills students and citizens will need to be effective, including these:

- Information literacy
- Media literacy
- Information, communications, and technology (ICT) literacy

Finally, it maintains that living and working today and in the future will require more than just core knowledge and thinking skills. It states that to be successful, students will need to develop adequate life and career skills, such as the following:

- Flexibility and adaptability
- Initiative and self-direction
- Social and cross-cultural skills
- Productivity and accountability
- Leadership and responsibility

The world is changing, and the skills required for students to be successful in the world of their future are also changing. Education systems across the developed world, part of whose mandate is to prepare students to become productive citizens, have thus had to shift from a curriculum focused on “three Rs” to

one designed to build student competency in the above skills. Instead of “Reading,” which was defined as comprehending print, and “Riting,” defined as being able to express oneself using pen, pencil, and paper, schools are now charged with teaching students to communicate effectively in many forms, including reading print and nonprint media and critically evaluating books, periodicals, material from the media and the Internet, and so on, as well as being able to express themselves clearly and cogently in a wide variety of media. Instead of “Rithmetic,” the manipulation of numbers, schools must now teach numeracy, the understanding of numbers and how to solve mathematical problems. In addition, management skills and teamwork skills that were not taught in the past have now become expectations. At the same time, schools and school systems are more accountable than ever before.

## **THE INTERNATIONAL DRIVE FOR ACCOUNTABILITY IN EDUCATION**

In the last two decades, a tidal wave of accountability has swept around the world. Increasingly, organizations, whether in the private or public sectors, have been measured by the quality as well as the quantity of their products or services. At the same time, there has been a huge trend toward teamwork and cooperation in all aspects of life. Not surprisingly, schools have not been immune to these trends: All around the developed world, taxpayers are demanding proof that the tax dollars they are spending on the public school system (or the money they are spending to send their children to private schools) are resulting in educated students who can read, write, solve mathematical problems, and have some fluency in second (or third) languages and the arts. That proof, whether to inform a school community, a state or national agency, or international comparative studies, can only come in the form of data provided by schools. The gathering of such information on a national scale is epitomized by the No Child Left Behind legislation in the United States and in the Every Child Matters apparatus in the United Kingdom. At the same time, stakeholders want a say in how schools are run to ensure that the data show that students are achieving these goals.

Politicians across the developed world have responded to changes in societal needs: The desire for accountability in all public

institutions and the need for teaming and economic pressures to legislate change are at an unprecedented level. Wherever educators look, in the United States, in the United Kingdom, in Australia, in Canada, in the European Union, in Singapore, and elsewhere, legislation has mandated new educational targets backed by large-scale assessment and data collection with attendant rewards and penalties.

## **The Pillars of Government Education Policy**

Governments expect changes in education to be tracked. Educators know that appropriate, complete data is the only way to inform school decision making correctly on the way to meet defined targets. With appropriate evidence informing school decisions, educators are expected to progress in five major strands toward excellence (see Figure 1.1 on page 8), explained more fully below. Each strand, required to be demonstrated through the use of school-based evidence, is felt to be essential to excellence in education and is defined by student success.

### ***Public Accountability***

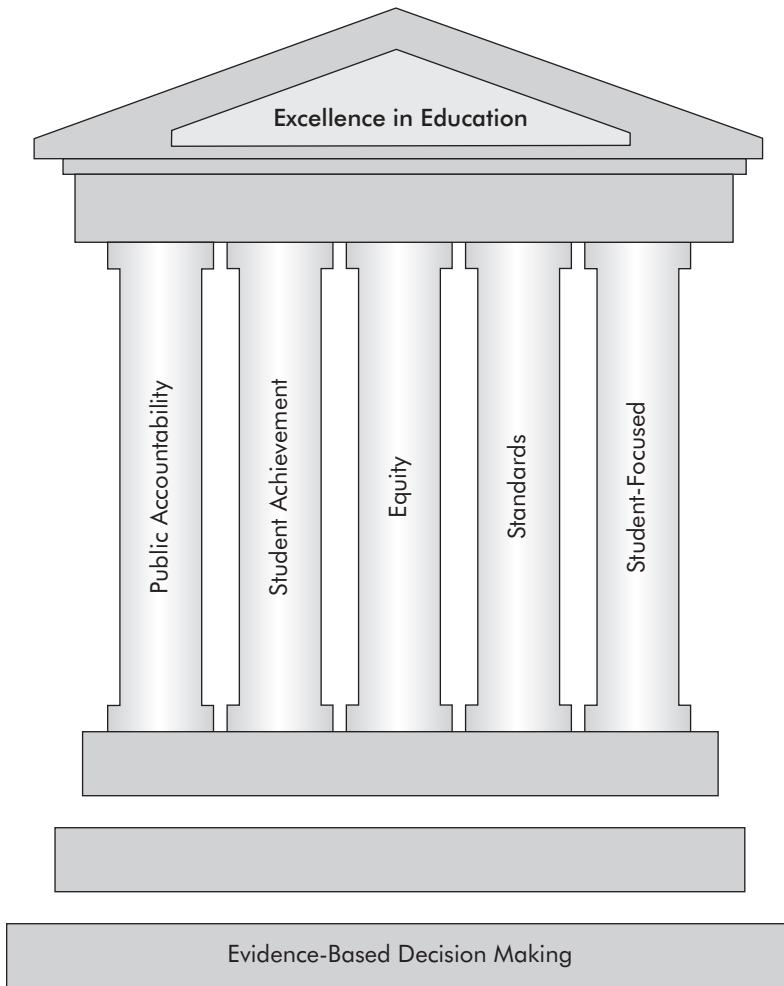
Societies value their schools and recognize that the educational level of the population within a country is a strong indicator of the economic health of that country. For that reason, governments and the people they represent are willing to finance public education. But they want to ensure that their money is being spent effectively and that children are being educated properly. They require evidence of an adequate return on their investment—that the money spent is demonstrably benefiting the state at the best possible rate.

### ***Student Achievement***

The focus of education is student achievement. In the words of Brian Benzel, superintendent, Spokane (Washington) Public Schools, “We wanted to make sure that a year’s worth of instruction was resulting in a year’s worth of gains” (AASA, 2002, p. 10). Governments and the people they represent want a good rate of return on their investments, and the true measure of the output of the education system is change in student achievement

**Figure 1.1** Pillars of Government Education Policy

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over time. This can only be measured through the use of assessment data, where student achievement is compared to a standard and those assessments are evaluated and reported.

### ***Equity***

In the past 30 or so years, the public has demanded that education be inclusive: that no child is left behind. Today's

schools welcome every child and must provide education for all students with special needs, as each child is expected to learn to the best of his or her ability. Similarly, increased immigration has resulted in an increase of students whose first language is not English, and schools are expected to provide appropriate educational opportunities while assisting these students to acquire mastery in English. Schools are required to demonstrate that this is happening and that any extra funding is being used to provide equity of opportunity for all students.

### ***Standards***

As society has become more multinational, people have become more aware of the need to compete internationally. Industries have to compete in a global environment, and they then require that their workforce be equivalent or superior in knowledge and skill level to others across the world. This, in essence, means that to be globally competitive, states need a workforce that is educated by a public education system that matches that of any other state. Thus, curricula across the world have become more uniform, and state-to-state as well as country-to-country comparisons, through national and international testing, have become commonplace.

Schools are being measured for return on investment, and only valid data based on international standards can provide authentic comparisons.

### ***Student Focused***

Today governments all across the developed world are calling for public accountability, equity, and a focus on student achievement as measured against international standards as pillars of educational policy. They are requiring evidence to demonstrate that these public policy goals are being met, that the pillars are standing and fully formed, and that the result will inevitably be excellence in public education.

School administrators now need to deal with the new demands caused by such increased accountability and the growing need to work cooperatively with the school community of staff, parents, community leaders, and, in middle and secondary schools, students. Principals need an open process to collect relevant local information and to work with teams to

use that evidence to create movement toward stated school goals, especially student success. They also need a factual base from which to demonstrate such movement and student success to continue to form a basis for positive, productive partnerships within and without the school community.

Both needs can be built only from the appropriate use of data or evidence.

### **Improving Student Achievement**

Victoria L. Bernhardt (1998) gives the example of a high school in rural northern California, where 95 percent of graduates did not complete their first year of college (p. 10). Assuming that the graduates lacked the appropriate social skills for success in a university setting, the school district concentrated efforts on remedying this lack. However, the lack of success continued. Not until interviews were done with returning students did the district find that the real cause of the problem was the students' inability to write at the university level. When this issue was addressed, most graduates became successful in college, and the district began to use data to inform decisions.

Similarly, an elementary school in a rapidly growing area in Ontario, Canada, found that few students were enrolling in their kindergarten programs that were offered on a half-day basis. Parents often delayed enrollment until the first grade, when attendance is mandatory. That often presented a curricular challenge to the school. Research into parental demographics quickly disclosed that in most families, both parents worked full-time and that often those parents had fairly long commutes to get to their place of employment. Further inquiry revealed that these families often needed day care all day every day and the half-day program did not meet their needs. When the school began to offer a licensed day care facility that accepted children early in the morning, fed into the kindergarten program, and minded the children for the other half of the day and after school, enrollment soared.

As Lorna Earl and Steven Katz (2006) write:

When policy makers and school personnel either ignore data or rely on inadequate data, they run the risk of making poor decisions. Without good data, school personnel may be blindsided



or make decisions based upon individual perceptions, opinions, and limited observations. Valuable time, energy, and resources are wasted when new programs and practices are adopted that apply foreign organizational cultures, lack evidence of effectiveness, or do not match up with student needs. The effect on students and their learning is even more important than the loss of time and energy, as another month or year passes without the implementation of effective strategies. (p. 6)

But having the complete, relevant data is still not enough. Data must ultimately be used to improve student performance. Schools must be focused, through a plan, on increasing student success, and that plan cannot only be based on whether or not the students reached the standards in the required time; it must be incremental and measure progress toward those goals. International testing is not enough. To be accountable, to improve student achievement equitably toward reaching or surpassing international standards, all resources in the educational system, be they human or financial, must be directed to improving student achievement. There must be a plan for how to get students to the point where they can compete successfully internationally, and that plan must be verified by evidence.

## **SCHOOL IMPROVEMENT PLANNING FOR STUDENT ACHIEVEMENT**

Every school, school district, state, and country wants its students to be successful. To do so, each must clearly define what that success will look like (create a target) so that it knows what it is aiming for. Schools can only change successfully when they focus on specific goals, develop strategies to reach those goals, and monitor their progress with feedback loops. School improvement planning is a process for doing just that: setting goals for improvement in student performance, making decisions about how to achieve those goals, and creating monitoring systems to ensure that the school is moving toward those goals. The ultimate objective is always to improve student achievement in the areas designated by the country, state, district, and school in ways relevant to the individual school in context.

School improvement planning is so important that it has been mandated across the developed world.

School improvement plans are selective: they help principals, teachers and [parents] answer the questions “What will we focus on now?” and “What will we leave until later?” They encourage staff and parents to monitor student achievement levels and other factors, such as school environment, that are known to influence student success. With up-to-date information about how well students are performing, schools are better able to respond to the needs of students, teachers and parents.

A school plan is also a mechanism through which the public can hold schools accountable for student success and through which it can measure improvement. (Education Improvement Commission, Ontario Ministry of Education, 2000)

School improvement is the single most important business of the school, in that it is the process schools use to ensure that all students are achieving at high levels. The continuous School Improvement Planning Cycle is the process used to coordinate and prioritize all the work of the school in the context of student achievement. (State of Washington, Superintendent of Public Instruction, 2006)

### **Keeping School Planning on Track**

Effective school planning works much like a space probe. Using all the evidence available, a target is chosen, and the rocket is fired. Immediately, positional data are sent back to the control center by the missile. Controllers then compare those data with the information they have about where the missile should be going given the planned trajectory. If everything is going as planned, the controllers do nothing, but if there is a difference between where the rocket is supposed to be and where it is, they can make corrections by firing steering rockets to get the probe back on course. This exchange of information and corrective action happens almost continuously so that large corrections are unnecessary and the probe will reach its target. Without continuous course corrections, the probe would most likely stray off track

and never reach its goal. Similarly, school planning can easily get off track and never have its intended outcomes.

As an example, the state test scores of a school showed that its students were weak in problem-solving skills in mathematics. The school invested much time and money over the next year in designing a plan and working with its students to improve mathematical problem-solving skills. Much emphasis was placed on translating word problems into mathematical statements, then working through the mathematics and stating the answer. Staff and parents alike awaited the results of the next year's testing. Alas, the score in mathematical problem solving had not improved at all. Disappointed and somewhat angry, The staff at first blamed the testing organization but then began looking at individual test papers to find out what was causing the continued poor scores. To their surprise, they soon found the issue: the test asked students to describe how they had solved the problem, and their students had not been able to describe their process effectively in writing. The next year, the school emphasized verbalization of the process of solution and checked that students could do this by using mock testing. Scores improved dramatically on the next state test.

### **Sorting Through the Available Data**

Data, especially the kind generated by No Child Left Behind and Every Child Matters, are now available to almost every school in the developed world. However, the question still remains as to whether or not they are being used effectively for school improvement planning.

As Alan Greenblatt (2007) writes,

No Child Left Behind will continue to move states and districts in two different directions. On the one hand, there will be some that try to fudge the numbers as best they can in order to make themselves look better. They will, in effect, be lying to students and parents about whether kids are actually proficient in basic subjects.

On the other hand, an increasing number of states and districts will be using data more confidently and aggressively in order to aid instruction. For them, the data requirements of No Child Left Behind have whetted an appetite for more and better data that does not merely show standardized results

but can inform improvements in the classroom. (“Two Different Directions”)

In other words, many schools and districts are actively seeking rich data to inform and make decisions about their school improvement planning. Such information is crucial to the validity of the school planning process; without it, schools wander in the wilderness without reliable signposts or landmarks. The landscape is all shifting sand, and progress toward the goal is erratic and improbable.

Sometimes decision making around the school improvement plan has been based on intuition, tradition, or convenience. This results in the following:

- Scattered staff development programs
- Budgetary decisions based on prior practice or priority programs
- Staff assignments based on interest and availability
- Reports to the community about school events
- Goal setting by board members, administrators, or teachers, based on votes, favorite initiatives, or fads
- Staff meetings that focus on operations and the dissemination of information
- Parent communication via twice-a-year conferences, open houses, and newsletters
- Grading systems based on each teacher’s criteria of completed work and participation
- Periodic administrative team meetings focused solely on operations

However, when decision making is based on data, the following can result:

- Focused staff development programs as an improvement strategy to address problems/needs identified by the data
- Budget allocations to programs based on data-informed needs
- Staff assignments based on skills needed as indicated by the data
- Organized, factual reports to the community about the learning progress of students

- Goal setting based on data about problems and possible explanations
- Staff meetings that focus on strategies and issues raised by the local school's data
- Regular parent communication regarding the progress of their children informed by specific data
- Grading systems based on common criteria for student performance that report progress toward the standards as well as work skills
- Administrative team meetings that focus on measured progress toward data-based improvement goals (Technology Alliance, 2005)

Without valid, reliable, complete, and consistent information, the school improvement plan will rarely result in true improvement. If the evidence is not valid, the inferences and conclusions drawn from it are unlikely to be either useful or accurate—the evidence must actually measure what it is intending to measure, and the sample must be large enough not to be influenced by sampling error. If there are questions about the reliability of the information, those questions apply to any conclusions or inferences drawn from that information. Reliability can be certain when information is consistent with other information. Only then we can be sure that data were collected in a trustworthy manner and that the instruments used to collect them were well designed and implemented. If data are inconsistent, they are probably either invalid or unreliable or both and should not be used. When evidence about the same thing drawn from the same students is consistent (not necessarily exactly the same), it is probably reliable and valid. The quality of the evidence collected certainly has a direct impact on the quality of the conclusions reached and, thus, the quality of the school improvement plan. The scope of the evidence collected has a similar impact.

There has been much discussion about *what* information to use in making informed instructional decisions. Large-scale assessment, such as that mandated by No Child Left Behind and Every Child Matters, is often the only data used, yet it is only part of the picture—a slice of information about how students perform on certain forms of testing at certain points of their educational careers. The data often arrive well after the time of testing, further complicating matters. Throughout this book, we will emphasize the use of other information, such as demographic data, classroom

assessments, and analyses of how instruction takes place in the classrooms, to flesh out the standardized assessment information collected throughout the developed world.

## **SUMMARY**

Many major shifts in culture have happened and continue to happen across the world, including the globalization of the economy, the changing nature of workplace needs, and the rising demand for accountability. All of these have had an impact on education. As the skills, knowledge, and attributes of a successful graduate have changed, as noted by such prestigious institutions as the Partnership for 21st Century Skills, the education needed by that graduate has changed and with it, the demand on our schools to provide that education. Principals, as school leaders, have become accountable on a local, state, and national level to provide evidence that their schools are equipping students to be successful in the 21st century.

Governments around the world, as funders of public school systems, are building accountability systems, such as No Child Left Behind and Every Child Matters, to attempt to ensure that every school is meeting requirements of equity, student focus, and transparent accountability about student achievement with a goal of meeting mandated standards. Schools and districts with a real interest in fostering the success of their students embrace this accountability and take it further than collecting and using the required data; they collect a much wider evidential base and use it in every aspect of the modification and improvement of instructional processes.

As we know, measuring the end product cannot change the outcome unless there are changes in the process of instruction informed by the gaps between the received data and the intended outcomes. The school improvement planning cycle is the essential and critical mechanism that translates the analysis of the evidence into a plan to change instruction and improve the data in intended ways. It is the link joining collected information to changing what goes on in classrooms and in the school, and it relies on the collected information being valid, reliable, consistent, and comprehensive.

Throughout this book, we shall be looking at the use of widely based evidence in planning, implementing, and reviewing change in a school in two ways. The first is educational: What are “good” data, where and how can they be gathered, and in what ways can they be used most effectively? The second looks at the principal’s role: How does an administrator teach staff, students, and community to use evidence well through all phases of the school improvement process? As we will explore in the next chapter, the principal is the key player in leading a school through a data-based school improvement cycle, and in this role, she or he has three critical dimensions.