

# MEASURING

## WHAT WE DO IN SCHOOLS

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# Measuring What We Do in Schools

*How well does your school measure the work it does?* Most schools respond to this question by saying, “We are doing a really good job of analyzing our data.” Unfortunately, many of these schools merely use every way under the sun to analyze their high-stakes test results. They have data walls, data binders, data teams, and send teachers to data retreats to help them analyze student performance on high-stakes tests.

Schools engage in these activities in good faith; however, many of these activities are counterproductive. The underlying assumption of working only on improving student achievement results on high-stakes tests is that only the students need to improve. The solution is often to offer tutoring, add after-school programs, or place students in special intervention classes. Many times the implementation of these strategies involves asking students to sit through their regular classes—although it is not expected that they will “get it”—and then to show up at the end of the day for lessons geared to their levels. These strategies result in spending more time repeating the same processes that produced the initial results.

What is inherently unsatisfactory with these “data use” trends is that they are too narrow. In effect, we might not be seeing the forest for the trees. Not looking at the school as a system can keep us from understanding the impact of our processes and the contributing causes of undesirable results, leaving us unable to eliminate their detrimental effect. When we listen to systems thinkers like Peter Senge, we hear them say that about 80

percent of what needs to change to get better results is *us!* (Senge, 2006.) Us, as in the *processes, practices, programs, and interventions* we are currently using that are producing these results. Evaluating our systems, processes, practices, and programs is the logical next step to seeing the forest *and* the trees.

## **Learning Organizations, Continuous School Improvement, Systems Thinking, and Program Evaluation: How Do They Work Together?**

*As learning organizations, "schools" are perfectly designed to get the results they are getting now. If "schools" want different results, they must measure and then change their processes to create the results they really want.*

—Adapted from W. Edwards Deming,  
Continuous Improvement Guru, *Out of the Crisis*

Many schools would say they “do” continuous school improvement. Many of these same schools would describe their continuous improvement efforts in steps similar to these:

1. Study high-stakes test results by student groups;
2. Determine gaps among student groups;
3. Take last year’s plan from the shelf and rewrite it to arrange interventions for the groups of students with the largest gaps;
4. Submit the plan to funding sources to secure funding for the interventions;
5. Print the plan, place it in a binder, and arrange it artistically on a shelf with the plans from previous years;
6. Hope the interventions will make a difference in student achievement; and
7. One year later, start again with step 1, above.

Unfortunately, as they plan for school improvement, many schools neither look at the big picture of where they are on measures beyond their

most recent high-stakes test scores, nor do they study how they got their results to determine if new solutions might improve students' results. Paul Black and Dylan Wiliam (1998) sum up the conundrum quite eloquently:

How can anyone be sure that a particular set of new inputs will produce better outputs if we don't at least study what happens inside?

These same schools would say they want to "do" a systemwide evaluation; they just don't have the resources, the time, or the know-how.

In this book, I hope to change school staff thinking on both continuous school improvement and evaluation, and give staff members tools to embrace systems thinking and become a true learning organization. I want program managers; teachers; and school, school district, and state and province administrators to come away from this book with an understanding of how to carry out comprehensive, systemwide evaluations of programs and processes in their learning organizations. I also want preservice teachers and administrators to use this book to get a firm grounding of the critical role program evaluation serves in school success, and learn how to implement meaningful evaluations that matter to schools. Specifically, this book will:

1. Present how continuous school improvement can guide evaluation and systems thinking in schools.
2. Show educators that evaluation work is logical and easy to do, giving them the confidence that they can—and should—be doing this work on a regular basis.
3. Shift thinking about evaluation from something that is done *to* educators to something *they need to do* on a continuous basis to make sure their work is making the intended difference.
4. Unpack a logical framework that teachers and administrators can use to evaluate programs, processes, and an entire school.
5. Expand teachers' and administrators' *data-informed decision-making* focus to include:
  - assessing what is working and what is not working for their students;

- determining which processes need to change to get better results;  
and
- using data, on an ongoing basis, to improve practices.

Before we tackle these goals, let's start by reviewing the definitions and intentions of the concepts *learning organizations*, *continuous school improvement*, *systems thinking*, and *program evaluation*. Then we must determine how the concepts work together, and why we must work with all these concepts in a comprehensive evaluation. As we progress, you will see what it will look like when we implement these concepts the way they are intended to work together.

## Learning Organizations

Learning organizations are, according to Senge, "Those organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together."

Senge believes that only those organizations that adapt quickly and effectively can excel. In order to become a learning organization, two conditions must be present at all times. First, the organization must be purposefully designed to achieve the desired outcomes. In addition, the organization must develop the ability to recognize when its direction is moving away from the desired outcomes. The organization must have the capacity to get back on track. Organizations that are able to do this are exemplary. Learning organizations that can do this are continuously improving organizations.

Singapore American School is a true learning organization. Its mission is to "provide each student an exemplary American educational experience with an international perspective." The school's mission is to be "a world leader in education, cultivating exceptional thinkers, prepared for the future." To this end, the school embraces experiential learning, service learning, and personalized learning with high-impact, standards-based instructional practices. To do this with almost 4,000 preschool to grade 12 students from 50 nations, the staff has to continually learn and adjust.

As one administrator writes in his biography, “Singapore American School is a place that is nimble and courageous enough to support revolutionary change while upholding a tradition of proven excellence.” (For more information on the Singapore American School, go to [sas.edu.sg](http://sas.edu.sg).)

## Continuous School Improvement

This is the ongoing effort to improve results, services, and processes. Continuously improving schools aspire to become learning organizations.

After a year’s intensive training in continuous school improvement and comprehensive data analysis, leadership teams in Hawaii work to institutionalize continuous school improvement methods in everything they do. They start each new school year reviewing schoolwide data and expectations for the year and outcomes for the short-term and long-term. The entire staff analyze and understand why it is important to know schoolwide data. Together, they revisit the mission and vision of the school, and they discuss the implications in their grade levels and cross-grade-level teams. They establish assessment, instructional monitoring, and systemwide collaboration strategies to ensure that every student is learning, that every classroom is of highest quality, and that they have instructional coherence. The principal and instructional coaches meet regularly with teachers, grade-level teams, and the whole staff to ensure that the plans are being implemented with integrity and fidelity, and that every student is learning. At the end of the year, staff celebrate the gains made for every student, attributed to staff working smart and together.

## Systems Thinking

Systems thinking is the process of understanding how things influence one another within a whole. In learning organizations, systems consist of people, structures, programs, and processes that work together to help organizations get the results they want. Continuous improvement processes work hand in glove with systems thinking to ensure healthy learning organizations.

For example, designing a system of prevention—also known as response to intervention (RtI)—is a daunting task for most schools. One reason

schools fail at this task is that they think of RtI as a program or a way to pull low-performing students out of classrooms to get help. RtI is a huge system; in fact, it must become the school system. To be successful, RtI requires systems thinking. Instead of considering RtI as a set of interventions for low-performing students, one must embrace it as the system of assessment and instruction in the school that helps every student grow in learning, every year. Using systems thinking, a schoolwide RtI team can review all classrooms' assessment results, and then determine interventions to ensure success for all students. This systems-thinking approach permits the school to adjust resources and materials across classrooms and grade levels, as needed, and determine if there are system weaknesses that need direct mediation.

### **Program Evaluation**

This is the systematic collection of information about the activities, characteristics, and results of programs to make judgments about the program, improve or further develop program effectiveness, inform decisions about future program development, and increase understanding (Patton, 2008). Evaluation of programs and processes is needed to improve an organization on an ongoing basis and to understand the impact of the parts and their interactions on the system. Continuous improvement and systems thinking use program evaluation to create the learning organization that can produce desired results.

When I work with schools in continuous school improvement training, they are asked to make a list of all processes in the school—instructional processes, such as differentiated instruction, grading, and student self-assessment; organizational processes, such as leadership teams, teacher collaboration teams, and instructional coaching; administrative processes, like discipline strategies, attendance programs, and retentions; and programs, which often include special education, after-school programs, gifted, and 9th grade academies. Schools usually come up with at least 60 programs and processes that operate in the school. Figure 1.1 presents a sampling of school processes and programs. Most teachers tell me that they do not know if any or all of their processes are making a difference—separately or together.