

# Reach the Highest Standard in Professional Learning: Data

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“Investigation” refers to collecting and analyzing appropriate and pertinent information. While no evaluation can be completely objective, the process is not founded on opinion or conjecture. Rather, it is based on acquiring specific, relevant, and valid evidence examined through appropriate methods and techniques.

Using “merit or worth” in the definition implies appraisal and judgment. Evaluations are designed to determine something’s value. They help answer questions such as these:

- Is this experience or activity leading to the intended results?
- Is it better than what was done in the past?
- Is it better than another, competing activity?
- Is it worth the costs?

Answers to these questions require more than a statement of findings. They demand an appraisal of quality and judgments of value, based on the best data available.

### **The Critical Levels of Professional Learning Evaluation**

Effective professional learning evaluation requires consideration of the five critical stages or levels of information shown in Figure 1.2 (Guskey, 2000a, 2002a, 2005b). These five levels represent an adaptation of an evaluation model developed by Kirkpatrick (1959, 1998) for judging the value of supervisory training programs in business and industry. Kirkpatrick’s model, although widely applied, has seen limited use in education because of inadequate explanatory power. While helpful in addressing a broad range of “what” questions, many find it lacking when it comes to explaining “why” (Alliger & Janak, 1989; Holton, 1996).

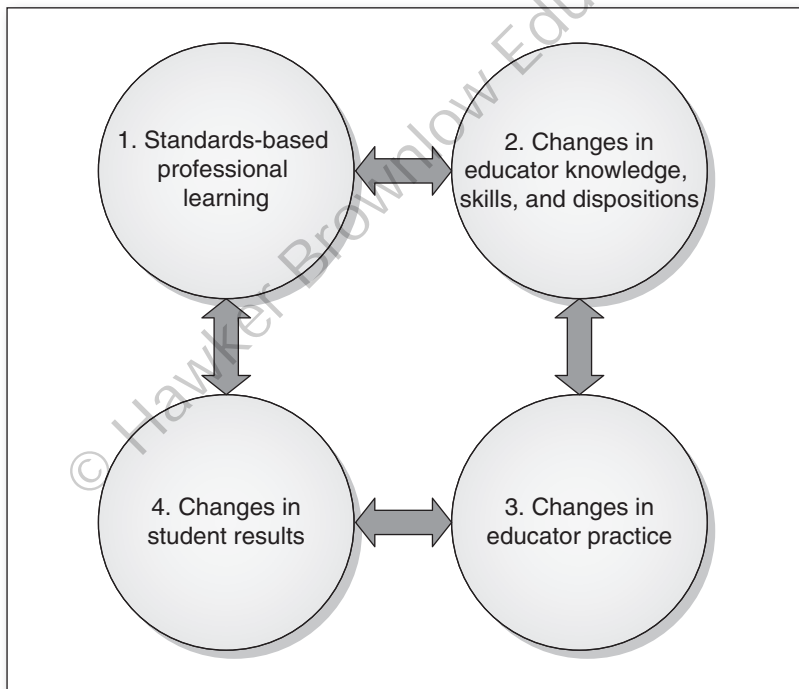
The five levels in this model are hierarchically arranged, from simple to more complex. With each succeeding level, the process of gathering evaluation data requires more time and resources. And because each level builds on those that come before, success at one level is usually necessary for success at higher levels.

**Level 1: Participants’ Reactions.** The first level of evaluation looks at participants’ reactions to the professional learning experience. This is the most common form of professional learning evaluation and the easiest type of data to gather and analyze.

endeavor with many factors influencing outcomes, a single piece of data cannot reflect the whole picture nor help us pinpoint critical actions required for our improvement efforts. Multiple sources of data help us identify trends not anomalies, critical elements not momentary occurrences, and long-term remedies not short-term temporary fixes.

To clarify the connection between professional learning and improved student learning, Learning Forward provides a graphic organizer to explain that relationship in the introduction to the professional learning standards (Learning Forward, 2011, p. 16). Figure 2.1 is the graphic used to illustrate the key factors and relationships.

**Figure 2.1** Relationship Between Professional Learning and Student Results



1. Effective professional learning, which is based on the standards of effectiveness and results, begins the process. Effective professional learning uses the cycle of continuous

Educators in an elementary school in Washington state describe a process called a Data Walk, which allows the whole faculty “time to study student data, discuss it with their colleagues, and consider implications for the school and classroom” (Bergman, 2012, p. 46).

1. The process begins with the creation of charts that display reading and math achievement results for each grade level that have been posted around a room large enough to hold the faculty. The charts have been enlarged to poster size so they are easy to read and don’t require each member to have their own copy.
2. Small groups of 4–5 people are formed. It is helpful to create these teams ahead of time to ensure heterogeneous membership: broad representation from different grade levels, levels of experience, special areas, and paraprofessionals. The group also has a set of sticky notes.
3. Each team stands next to a poster and discusses two questions:
  - What “ahas” do you notice from these data?
  - What questions do you have about the data?
4. After 7–10 minutes the Timekeeper calls time and each team writes at least one “aha” and one question on the sticky notes and leaves them with the data chart. Then, all teams in unison rotate to the next poster and continue the same process.
5. This rotation continues until each team has analyzed and discussed all posters.
6. When this process is completed, new groups are formed that represent same-grade level teams, with specialists divided among those teams. Each group assigns someone to serve as a recorder. Then, for 12–15 minutes each group reviews the comments and questions from its own grade-level poster(s) and discusses the implications for the grade level and the school. The recorder takes notes on these implications on a piece of large, blank poster paper.
7. After the group reconvenes, each Recorder posts the implications and reviews them in front of the whole group.

**Figure 2.4** Sample 30–60–90 Monitoring Chart

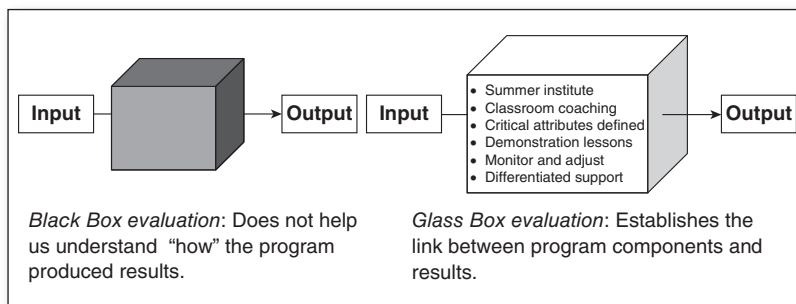
<i>Elements</i>	<i>30 Days</i>	<i>60 Days</i>	<i>90 Days</i>
<i>Our major focus</i>	Reading comprehension	Reading comprehension	Reading comprehension
<i>What adults are doing</i>	Focusing on developing a range of questions including higher-level thinking	Focusing on developing a range of questions including higher-level thinking	Focusing on developing a range of questions including higher-level thinking
<i>What students are doing</i>	Majority of time students use higher-order thinking skills	Majority of time students use higher-order thinking skills	Majority of time students use higher-order thinking skills
<i>Skills being learned</i>	Compare and contrast	Compare and contrast	Classifying: Organize according to similarities
<i>Tools and materials being used</i>	Graphic organizers: Venn Diagram	Graphic organizers: Comparison Matrix	Graphic organizers: Bubble Chart
<i>Challenges, benefits, and frustrations</i>	Teachers and students will be frustrated because they won't feel successful at this yet	Student frustration, matching questions to those found on the state assessment	Teachers need to scaffold learning to assist special needs students with higher order—these questions are rare

link in the change process—has there been any change in classroom practices that could be correlated to student improvement? This is sometimes referred to as a Black Box evaluation (Killion, 2008). A Black Box evaluation indicates only whether student learning has changed but can't tell us *why* that outcome occurred. A Glass Box evaluation will link the input factors to results. It explains whether classroom coaching led to higher-quality implementation in the classroom, for example (see Figure 2.6).

Evaluating whether educator practice has changed requires a new set of knowledge and skills for building and district administrators, instructional coaches, and teacher leaders. Yet, the same tools and processes used to monitor progress, explained in the last section of this chapter, are also used to determine the quantity and quality of implementation of new practices. This step of the evaluation process is also described by Guskey in *Level 4: Participants' Use of New Knowledge and Skills* in the first chapter of this volume. As noted by Guskey, this information can be used to restructure professional learning to ensure more educators implement desired practices with quality, thus resulting in improved student learning.

Guskey's work, in the first part of this volume, describes one model of professional learning evaluation. Another professional learning evaluation model was developed by Joellen Killion (2008). The critical components of an evaluation framework developed by Killion are provided in Figure 2.7. These are key decisions that need to be made when planning a comprehensive evaluation of professional learning. Each of the components will be described in more detail in the next part of this section.

**Figure 2.6** Black Box Evaluation and Glass Box Evaluation





refined classroom practice by introducing the critical attributes of high-quality student learning teams: everyone doing the work together, no single team member doing all the work, students providing help to others until they could do the work, and everyone preparing to explain how the work was done.

### **Tool: Theory of Change**

A theory of change is a helpful tool that can assist schools and districts to create a comprehensive evaluation plan including both formative and summative evaluation. A theory of change assists principals, the school leadership team, and instructional coaches to define the major components of a professional learning plan and explain the sequence of those components. It can highlight the kinds of resources that will be needed to make the change in practice (see Figure 2.8). It also illustrates how those steps lead up to and support intermediate or long-range changes in educator practices and student outcomes. A theory of change also articulates the underlying assumptions that are the foundation of the plan and makes explicit the thinking that undergirds the plan. For example, do the planners believe that classroom coaching is imperative for effective implementation of new strategies or that educators will use new strategies when mandated to do so?

This theory of change is based on the following underlying assumptions:

- When teachers understand various instructional strategies and have time to plan lessons and gather materials, they can be expected to use them.
- In order to use new instructional strategies, teachers need to have the appropriate resources.
- Successful use of new strategies builds with increased practice and support.
- Classroom-based coaching and teacher collaboration is the best way to support teachers as they apply new practices.
- Consistent use of new practices comes over time.
- Student achievement results from consistently applied practices delivered by teachers who have in-depth understanding of content and content-specific instructional strategies.

## LONG-TERM COMMITMENT

Using data is a long-term commitment, Bamberg said.

Bamberg said district leaders again are evaluating their student evaluations, looking at every grade level and subject to identify which might need additional assessment. In addition, she said the district is moving to project-based student assessments that are more seamless within the course of teachers' instruction rather than the paper-and-pencil, multiple-choice versions.

"We're trying to do a mix of things that will help kids do a better job with the rigor and the writing," Bamberg said. "We had to look at what every kid is having to do, so we're trying to stagger a lot of the exams. Our testing schedule has gotten a lot of revision over the years."

Ptomey said the district has reviewed its needs and is working to continue to improve some fundamentals—the graduation rate and reading. The state instituted a new standardized exam with more rigor, and the district's achievement scores dipped.

"We know we really need additional support for teachers on teaching reading," Ptomey said. "Our scores mean 30% of our kids can't read at grade level. That's not good. Although there are people who would be very happy with that (given the student population), that's inexcusable. It's a horrible sense of urgency to make sure every kid can read at grade level."

This focus on monitoring each student's progress and constantly tweaking instruction is what keeps Aldine moving forward.

"It's just a part of our culture," Ridgway said. "It's what we *do*."

### THE VIEW FROM THREE ROLES

WANDA BAMBERG, superintendent

Initially we had to set up the expectations. When we first started off, we were in an achievement crisis. And so our approach was very top-down. We did not come in with a group of people sitting around in a room sharing good feelings. We brought in a team that we wanted to come up with the answers, we got the answers, and we told people, "This is what we're going to do." We weren't necessarily harsh, but we said, "We will be giving these assessments."