Advancing Formative Assessment in Every Classroom: A Guide for Instructional Leaders

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Chapter 1. The Lay of the Land: Essential Elements of the Formative Assessment Process

When teachers join forces with their students in the formative assessment process, their partnership generates powerful learning outcomes. Teachers become more effective, students become actively engaged, and they both become intentional learners.

We can use the metaphor of a windmill to visualize the formative assessment process and its effects. Just as a windmill intentionally harnesses the power of moving air to generate energy, the formative assessment process helps students intentionally harness the workings of their own minds to generate motivation to learn. Propelled by the formative assessment process, students understand and use learning targets, set their own learning goals, select effective learning strategies, and assess their own learning progress. And as students develop into more confident and competent learners, they become motivated (energized) to learn, increasingly able to persist during demanding tasks and to regulate their own effort and actions when they tackle new learning challenges.

When a windmill whirls into action, its individual blades seem to disappear. The same thing happens to the six elements of the formative assessment process. These interrelated elements are the following:

- Shared learning targets and criteria for success
- Feedback that feeds forward
- Student goal setting
- Student self-assessment
- Strategic teacher questioning
- Student engagement in asking effective questions

As teachers and students actively and intentionally engage in learning, the individual elements unite in a flurry of cognitive activity, working together and depending on each other. Their power comes from their combined effort.

What Is Formative Assessment?

Formative assessment is an active and intentional learning process that partners the teacher and the students to continuously and systematically gather evidence of learning with the express goal of improving student achievement. Intentional learning refers to cognitive processes that have learning as a goal rather than an incidental outcome (Bereiter & Scardamalia, 1989). Teachers and their students actively and intentionally engage in the formative assessment process when they work together to do the following (Brookhart, 2006):

- Focus on learning goals.
- Take stock of where current work is in relation to the goal.
- Take action to move closer to the goal.

The primary purpose of formative assessment is to improve learning, not merely to audit it. It is assessment *for* learning rather than assessment *of* learning. Formative assessment is both an "instructional tool" that teachers and their students "use while learning is occurring" and "an accountability tool to determine if learning has occurred"

(National Education Association, 2003, p. 3). In other words, to be "formative," assessments must inform the decisions that teachers and their students make minute by minute in the classroom. Figure 1.1 compares the characteristics of formative assessment and summative assessment.

Figure 1.1. Characteristics of Formative and Summative Assessment	
Formative Assessment (Assessment *for* Learning)	**Summative Assessment (Assessment *of* Learning)**
Purpose: To improve learning and achievement	**Purpose:** To measure or audit attainment
Carried out while learning is in progress—day to day, minute by minute.	Carried out from time to time to create snapshots of what has happened.
Focused on the learning process and the learning progress.	Focused on the products of learning.
Viewed as an integral part of the teaching-learning process.	Viewed as something separate, an activity performed after the teaching-learning cycle.
Collaborative—Teachers and students know where they are headed, understand the learning needs, and use assessment information as feedback to guide and adapt what they do to meet those needs.	*Teacher directed*—Teachers assign what the students must do and then evaluate how well they complete the assignment.
Fluid—An ongoing process influenced by student need and teacher feedback.	*Rigid*—An unchanging measure of what the student achieved.
Teachers and students adopt the role of intentional learners.	Teachers adopt the role of auditors and students assume the role of the audited.
Teachers and students use the evidence they gather to make adjustments for continuous improvement.	Teachers use the results to make final "success or failure" decisions about a relatively fixed set of instructional activities.

Here are some examples of the formative assessment process in the classroom:

- A teacher asks students in his 6th grade social studies class to form pairs to generate three strategic questions that will help them better meet their learning target of describing how erosion has produced physical patterns on the earth's surface that have affected human activities.
- Before a lesson on creating a family budget, a consumer science teacher states the goals for the lesson and asks the students to paraphrase the goals.
- In a high school English class, students use a rubric that they generated as a class to plan their essays, monitor their writing, and edit their drafts in order to meet the criteria for a successful essay.
- In his feedback to a 1st grade student, a teacher shows the student what she did correctly in her attempt to draw the life cycle of a frog. Then the teacher gives the student a strategy to use to improve the accuracy of her drawing before she turns in her final sketch.
- A middle school student decides to use a story map to plan his short story depicting life in the Victorian era. It will help him reach his goal of improving the organization and sequencing of his story.

What Three Questions Guide the Formative Assessment Process?

The formative assessment process aligns what happens in the classroom—day to day and minute by minute—with three central questions:

- Where am I going?
- Where am I now?
- What strategy or strategies can help me get to where I need to go?

These central questions guide everything the teacher does, everything the student does, and everything teachers and their students do together. The questions are deceptively simple, yet to address them students and teachers must become skilled assessors who can gauge the gap between the students' current level of understanding and the shared learning target. Only then can they choose appropriate strategies to close the gap.

This continuous process of setting a learning target, assessing present levels of understanding, and then working strategically to narrow the distance between the two is the essence of formative assessment. Once a learning target is mastered, a new "just right" target is set and the process continues forward. It comes down to the Goldilocks Principle: to generate motivation to learn, the level of challenge and the level of support must be just right. And that means all classroom decisions—those made by the teacher and those made by the students themselves—must be informed by continually gathering evidence of student learning.

The three central questions of the formative assessment process are a great starting point for school leaders as they help teachers recognize and use formative assessment in their classrooms. The questions can guide teachers as they (1) plan their lessons, (2) monitor their teaching, and (3) help their students become self-regulated learners. Teachers can display the questions in their classrooms and remind their students to think about them before, during, and after each learning experience.

How Does the Formative Assessment Process Affect Student Learning and Achievement?

There is a firm body of evidence that formative assessment is an essential component of classroom work and that its development can raise standards of achievement. We know of no other way of raising standards for which such a strong prima facie case can be made.

—Paul Black & Dylan Wiliam,
"Inside the Black Box: Raising Standards Through Classroom Assessment"

The research is clear: formative assessment works. It works because it has a direct effect on the two most important players in the teaching-learning process: the teacher and the student.

In too many classrooms, teachers and their students are flying blind. Teachers cannot point to strong evidence of exactly what their students know and exactly where their students are in relation to daily classroom learning goals. The lack of detailed and current evidence makes it particularly difficult for teachers to provide effective feedback that describes for students the next steps they should take to improve. Students are operating in the dark as well. Without the benefit of knowing how to assess and regulate their own learning, they try to perform well on assignments without knowing exactly where they are headed, what they need to do to get there, and how they will tell when they have arrived.

Effects on Teacher Quality

Teacher quality exerts greater influence on student achievement than any other factor in education—no other factor even comes close (Darling-Hammond, 1999; Hanushek, Kain, O'Brien, & Rivkin, 2005; Thompson & Wiliam, 2007). Formative assessment affects teacher quality because it operates at the core of effective teaching (Black & Wiliam, 1998; Elmore, 2004). Engaged in the formative assessment process, teachers learn about effective teaching by

studying the effectiveness of their own instructional decisions. This practice promotes professional learning that is relevant, authentic, and transformational.

Despite professional development efforts focused on training teachers to use best practices in their classroom, studies clearly show that teachers do not always teach in ways that research supports as best practices for student learning. Rather, teachers teach in ways they *believe* to be best, often ignoring the findings of educational research. The distinction here is critical. Teachers' beliefs not only determine what they do in the classroom but also influence what they count as evidence that learning has occurred. And unless professional learning experiences help teachers examine their working assumptions about how students learn and how good teaching supports learning, they will not make meaningful changes in their teaching practices (Moss, 2002; Schreiber, Moss, & Staab, 2007).

Formative assessment can have a transformational effect on teachers and teaching (see Figure 1.2). In a very real way it flips a switch, shining a bright light on individual teaching decisions so that teachers can see clearly (and perhaps for the first time) the difference between the *intent* and the *effect* of their actions. Armed with this new perspective, teachers can take constructive action in their classrooms. They begin to collect and use strong evidence of exactly what works and exactly what does not work in their classrooms, with their students. And as they critically examine their own knowledge, practices, and working assumptions—during each day, during each lesson, and during each interaction with their students—they become inquiry-minded and keenly aware of exactly where they need to focus their change and improvement efforts in order to raise student achievement.

Figure 1.2. Impact of the Formative Assessment Process on Teachers

Teachers Adopt a Working Assumption That …	Teachers Take Constructive Action to …
Students learn more effectively when they know and understand the learning goal.	Bring precision to their planning. Communicate learning goals in student-friendly language. Unpack the exact criteria students must meet to succeed on each task.
To help each student succeed, I must know precisely where that student is in relation to the learning goal.	Continuously collect evidence of student learning to monitor and adapt their teaching during a lesson.
Effective feedback provides specific suggestions for closing the gap between where students are and where they need to be in relation to the learning goal.	Give feedback that is focused, generative, and descriptive. Develop a repertoire of feedback strategies.
One of the most important skills I can teach my students is how to regulate their own learning.	Teach their students how to self-assess. Make rubrics, checklists, guides, and other metacognitive tools an integral part of what students do before, during, and after learning.
Meaningful learning happens between minds, during strategic conversations, and when students become models of success for each other.	Encourage students to become learning resources for each other. Plan for and ask strategic questions that will produce evidence of student learning.

Motivation isn't something I can give to my students; it is something I must help them develop.	Align appropriate levels of challenge and just-right support. Intentionally create learning experiences in which students learn what they do well, what they should do more of, and how to focus their efforts to maximize success.

Effects on Student Learning

The effects of the formative assessment process on students are just as dramatic because it engages students in learning how to learn. Students learn more, learn smarter, and grow into self-aware learners who can tell you exactly what they did to get to exactly where they are. In other words, students become self-regulated learners and data-driven decision makers. They learn to gather evidence about their own learning and to use that information to choose from a growing collection of strategies for success. And students not only learn how to take ownership of their learning but also increasingly view themselves as autonomous, confident, and capable.

This combination of learning factors—ownership, autonomy, confidence, and capability—fortifies students with increased levels of resilience. Raising student resilience can derail a dangerous cycle for many students who attribute their failure to perform well on classroom tasks to a lack of academic ability. Judging themselves to be incapable of achieving and powerless to change things, they become discouraged and quit trying (Ames, 1992; Boston, 2002; Vispoel & Austin, 1995). Resilient learners, on the other hand, bounce back from poor performances and adversities. They attribute their failures and their successes on learning tasks to factors *within* their control. They rebound rather than giving up in the face of a challenge. Resilient students believe in their capacity to adapt what they are doing and how they are doing it in order to succeed.

And although formative assessment has a significant effect on learning for all students, it "helps low achievers more than other students and so reduces the range of achievement while raising achievement overall" (Black & Wiliam, 1998). For reasons we mention here and for many more we explore in later chapters, the formative assessment process is a compelling force for increasing student learning and closing the achievement gap.

How Does Formative Assessment Forge a Teacher-Student Learning Partnership?

High-quality formative assessment blurs the artificial barriers between teaching, learning, and assessment to forge a culture of collaborative inquiry and improvement in the classroom. As this learning partnership grows stronger, conversations about learning become the rule of thumb rather than the exception to the rule. Teachers and students work together to gather information about the strengths and weaknesses of their performances in ways that inform *all* learners and *all* learning in the classroom. They do this by talking with one another, planning with one another, comparing evidence of learning, and setting shared learning goals that establish the parameters of what counts as evidence that learning has indeed occurred.

The bottom line is that formative assessment fundamentally changes the quality and quantity of teacher-student interactions. And every day, throughout the day, what happens in the classroom focuses squarely on student achievement.

What Common Misconceptions Might Teachers Hold About Formative Assessment?

Misconceptions are the inevitable result of misunderstanding and often cause teachers to question the formative assessment process. Clearly these misconceptions can dilute the effectiveness of formative assessment and block its consistent use in the classroom. School leaders can take an active role in helping teachers build accurate

understandings of what formative assessment is and, perhaps most important, what it *is not*. They can include strategic talking points in their initial and ongoing conversations with teachers about formative assessment. Here we identify common misconceptions and suggest strategic talking points for each.

Misconception #1: Formative assessment is a special kind of test or series of tests that teachers learn to use to find out what their students know. This is probably the most common misconception regarding formative assessment. It is directly related to our sometimes careless custom of using the terms*assessment* and *test* interchangeably. Is it any wonder teachers mistakenly assume that formative assessment is a special kind of test item, test, or series of tests—something that they must administer *to* their students in order to audit learning?

Strategic talking points school leaders can use to address this misconception include the following:

- Formative assessment is not a test item, a test, or a series of tests.
- Formative assessment is an intentional learning process teachers engage in *with* their students to gather information *during* the learning process to improve achievement.
- Formative assessment is a learning partnership that involves teachers and their students taking stock of where they are in relation to their learning goals.

Misconception #2: Formative assessment is a program that teachers adopt and add to what they already do. This misconception can be traced directly to traditional inservice workshop models of professional development. More times than not, teachers are asked to enact a program or technique prescribed by outside experts and presented to them in a one-shot workshop. It stands to reason, then, that teachers often view formative assessment as a program or method they must learn and add to what they already do. This misguided view often leads teachers to wonder how they will find time to "do formative assessment" along with everything else they already "do" in their classrooms. This additive perspective makes it particularly difficult for teachers to recognize formative assessment as a dynamic process that shifts the classroom focus from instruction to learning and represents much more than simply adding a new technique to what currently exists.

Strategic talking points school leaders can use to address this misconception include the following:

- Formative assessment is not a prepackaged program or set of techniques that teachers adopt and enact.
- Formative assessment is a philosophy of teaching and learning in which the purpose of assessing is to inform learning, not merely to audit it.
- The formative assessment process is a fundamental reframing of the work teachers and students do day to day and minute by minute in the classroom.

Misconception #3: Any practice that gathers information for the purpose of improving programs or improving teaching is a part of formative assessment. The final misconception lies at the core of what qualifies a practice as formative assessment. Some educators mistakenly conclude that when teachers use assessment information to redesign or change a lesson, they meet the criteria of formative assessment. For example, a high school history teacher notes a troubling pattern on the final exam for her World War II unit. Half of her students mistakenly identified Germany as the country that suffered the most lasting damage from the war. As a result, she plans to change the way she teaches that content to her students next year. She intends to spend more time discussing the concept of lasting damage so that her future students can draw conclusions that are more accurate. In this example, the teacher uses information gathered after instruction to plan improved learning experiences for future students. Although the teacher's plan is laudable, it is not an example of formative assessment.

Strategic talking points school leaders can use to address this misconception include the following:

- To be considered part of the formative assessment process, information gathered must be used to inform the learning of *current* students.

- Although the quality of teaching rises as a result of formative assessment, the intended outcome must be to raise the learning and achievement of the students currently in the classroom on the concepts, processes, and skills that formed the basis for the assessment.

What Is the Connection Between Formative Assessment and Motivation?

The term *motivation* comes from the root word *motive*, which means "something that causes a person to act." Using that root, we can define motivation as something that energizes, directs, and sustains behavior toward a goal. Another way to say this is that motivation is goal-directed behavior combined with the energy and the intention to work toward that goal. In a very real way, motivation gets students learning, points them in the right direction, and keeps them engaged.

Although teachers cannot "give" motivation to their students, they can nurture, foster, and help their students develop more of it. Many educators view motivation as something that comes from external factors such as rewards, incentives, punishments, and warnings—carrots and sticks. This view is not exactly flawed, because one form of motivation, extrinsic motivation, fits nicely into this description. The crux of the matter, though, is that extrinsic motivation applied to the classroom requires that the teacher use rewards (such as stickers, grades, free time, bonus points) and punishments (such as loss of recess, detention, lowering a grade) to control the motivation of students. It follows that students will only be motivated as long as they are under the control of the teacher. Without the teacher, the motivation disappears. So much for lifelong learning!

In fact, research tells us that extrinsic rewards can actually undermine a student's internal (intrinsic) motivation over time. The most detrimental practices involve giving rewards as a direct function of a student's performance. These rewards follow a common pattern. Students who perform the best get the most rewards, and those who perform less well get fewer or no rewards. For students who cannot meet the requirements, this type of external control chips away at them over time to weaken their motivation to learn, undercut their performance, and leave them demoralized (Deci, Koestner, & Ryan, 1999). Understanding this effect, then, teachers should use extrinsic rewards sparingly and *always* as part of a plan to activate intrinsic motivation so that the external rewards can be gradually decreased and eventually removed.

In contrast, the formative assessment process has no downside. In fact, it is strongly linked to increased intrinsic student motivation. Like the windmill, formative assessment helps students harness the workings of their own minds to continuously generate and strengthen these four important components of motivation to learn:

- Self-efficacy—A learner's belief in his ability to succeed in a particular situation
- Self-regulation—The degree to which a learner is metacognitively, motivationally, and actively participating in her own learning
- Self-assessment—A learner's act of observing, analyzing, and judging his own performance on the basis of criteria and determining how he can improve it
- Self-attribution—A learner's own perceptions or explanations for success or failure that determine the amount of effort she will expend on that activity in the future

Throughout the remaining chapters, we will further unpack what we call the "motivation connection" by examining how the specific elements of the formative assessment process link to the components of intrinsic motivation. Figure 1.3 highlights those links and previews our upcoming examinations of the power of the formative assessment process to generate motivation to learn.

Figure 1.3. Links Between Formative Assessment and	**… Help Students Harness the Workings of Their Own Minds in the Following Ways …**	**… to Generate Components of**

Intrinsic Motivation **Formative Assessment Elements …**		**Motivation to Learn**
Shared Learning Targets and Criteria for Success	Directs students and teachers toward specific goals. Increases initiation for the learning task. Helps students and teachers monitor learning progress.	Self-efficacy Self-assessment Self-regulation Self-attribution
Feedback That Feeds Forward	Enhances cognitive processing. Fosters resiliency and persistence in the face of challenge. Provides students with specific next-step strategies.	
Student Goal Setting	Increases active student engagement. Shifts student focus from performance-directed to goal-directed behavior. Induces effort, increases persistence, and promotes development of new strategies.	
Student Self-Assessment	Shifts power from the teacher to the student. Engages students in actively collecting and interpreting assessment information. Helps students set more realistic and active goals for continuously raising achievement.	
Strategic Teacher Questioning	Directs students and teachers toward salient elements of the content, process, or performance. Scaffolds learners as they move beyond partial, thin, or passive understandings. Promotes conceptual change.	
Engagement of Students in Asking Effective Questions	Increases intentional and active student engagement. Promotes autonomy and independence. Develops students' perceptions of themselves as producers of knowledge and generators of important lines of inquiry. Gives students confidence to work through difficulties themselves.	

How Will I Recognize the Formative Assessment Process When I See It?

Because formative assessment is a systematic and intentional process of gathering evidence of learning, you can observe its effects in the classroom. These effects include what the teacher does, what the students do, what the products and performances look like, and how teachers talk about their students' learning. Figure 1.4 shows some examples of what you can look for inside the classroom. In upcoming chapters we share more "look fors" as we examine the specific elements of the formative assessment process.

Figure 1.4. Recognizing the Formative Assessment Process

Formative Assessment: An active and intentional learning process that partners the teacher and the students to continuously and systematically gather evidence of learning with the express goal of improving student achievement.

Teacher "Look Fors"	Student "Look Fors"
Teachers … Share learning goals in developmentally appropriate ways. Adjust their teaching on the fly to deepen student understanding and clear up misconceptions. Plan the questions they will ask throughout the lesson to help students focus on salient aspects of important concepts and the criteria for a successful performance. Teach specific metacognitive strategies to maximize student success. Provide feedback that is clear, descriptive, and task specific, and show students where they are in relation to the goal and what they should do next to close the gap. Greet student questions with respect and enthusiasm and respond in thoughtful ways. Use provocative questions to prompt student reflection on their understanding and performance. Model self-assessment using the kinds of reasoning skills that students will use to succeed at the task at hand. Describe student learning along a continuum of progress toward a specific learning goal, noting plans for adjusting instruction and levels of support to promote student growth.	Students … Understand and can explain what they do well and exactly what they should do next. Recognize when they are learning and when they are not. Use teacher-made rubrics, checklists, and guides to monitor and adjust the quality of their learning performance. Can adapt their learning strategies to meet their learning needs. Set their own learning goals and monitor their progress. Can assess their own work or performance in relation to the criteria for success. Set realistic short-term goals for where they want to be, the strategy they will use to get there, and the criteria they will apply to determine they have succeeded. Ask questions that seek clarity concerning concepts, tasks, and reasoning processes. Appear confident, engaged, and motivated to learn. Describe their learning in terms of where they are in relation to the learning goal and what they intend to do next to keep making progress.

How Can I Model the Formative Assessment Process in Conversations with Teachers About Their Own Professional Learning?

The formative assessment process constantly uses evidence to guide teaching and learning. When school leaders enter into collaborative inquiry with teachers, they not only model the formative assessment process, they embody it. Research on professional development tells us that when principals engage in periodic, short, focused, individual conversations with a teacher, they advance professional learning and produce positive change in teacher behavior in ways that far surpass the effects of the traditional "sit and get" workshops (Hall & Hord, 2000). In fact, one of the most strategic actions school leaders can take to bring about increased student achievement is to center their efforts directly on the inner workings of the classroom (Elmore, 2000).

School leaders can use formative discussions with teachers to promote "systematic and intentional inquiry" (Moss, 2000; Moss & McCown, 2007) into their classroom practices. Formative assessment operates at the nexus of what teachers believe to be true about teaching and learning, how those beliefs shape the ways teachers choose to teach, and the effects of instructional decisions on student achievement and motivation to learn. Each element of the formative assessment process helps educators assess what they are doing in their classrooms, why they are doing it, and how their choices are affecting their students. And because the formative assessment process requires teachers to use information about student learning to guide and promote student achievement, it helps their instructional decisions become increasingly intentional and scientifically based. The ability of formative assessment to promote and sustain active teacher inquiry that is both systematic and intentional is exactly why it can have a significant effect on daily classroom practices. Simply put, formative assessment situates powerful professional learning in the heartbeat of the classroom and encourages educators to approach their teaching as "intentional learning" (Moss, 2001).

As schools become places of collaborative inquiry, school leaders can use formative discussions to take a collegial rather than a supervisory perspective on professional learning, focus on each teacher's unique expertise and professional learning needs, and promote teacher collaboration to improve instruction (Glickman, Gordon, & Ross-Gordon, 1998). School leaders can use well-chosen starter statements that encourage shared inquiry. These starter statements situate the interaction as a formative conversation, center it on professional self-analysis of patterns of practice rather than ramifications of particular incidents, and keep the dialogue free from judgment or evaluation. The statements signal that the teacher is in charge of his or her own professional learning and indicate interest and support. These formative conversations can preview or follow a scheduled classroom visit with a single teacher. In addition, they can serve or launch collaborative inquiry among individuals in a small group or an entire school.

Strategic conversation starters signal that teachers are in charge of their own professional learning and indicate your interest and support. Here are some examples of how to begin a formative conversation with an individual teacher:

- *I know you pride yourself on reaching and teaching all students. I'd like to spend some time thinking with you about ways to collect strong evidence that students are achieving.*
- *I wanted to catch up and talk with you more about strategies you are using to increase student goal setting and self-assessment.*
- *The last time we talked you were concerned that your students were not skilled at regulating their own learning and you planned to use rubrics to help them become more competent in that area. Talk with me a bit about your students' self-regulation progress.*

Here are some examples of how you might begin a formative conversation with a group:

- *We are acutely aware of the need for our students to improve their reading abilities. Think with me about strategies we can all commit to using and monitoring that will increase the quality of reading for understanding across grade*

levels and the curriculum. In our conversations, let's be sure that these strategies meet the criteria for formative assessment.

- *During my classroom walk-throughs this week, I want to focus on the ways we are integrating formative assessment into our daily classroom practice. Think with me about a focus question that would guide the walk-throughs and our lesson planning for the week.*
- *It looks like we are making great progress in our efforts to provide effective feedback to our students. Let's keep that focus in the mix as we discuss how we can continuously and systematically improve the quality of our student feedback by sharing the feedback strategies that work best for each of us and the evidence that we gather to increase our confidence in these strategies.*

Notice that all of the examples open with an invitation to the teachers to think with you. The examples begin a conversation about teaching rather than signal an interrogation. Interrogating can trigger unwanted emotional baggage, derail collaborative inquiry efforts, be interpreted as confrontational, and signal that a grilling is waiting in the wings (Downey, Steffy, English, Frase, & Poston, 2004).

What If?

Given the realities of schools and schooling, there is a good chance teachers are already dealing with a variety of initiatives to improve teaching and learning and may be confused about how formative assessment is distinguished from other forms of assessment or data gathering. *What if you overhear a conversation among a group of teachers about how they feel benchmark assessments are the same as formative assessment?*

The first point to use to address this misconception is that benchmark assessments are interim assessments—they take place periodically, and although they are important for gauging student learning relative to content standards at a particular point in time, they do not inform teachers and students minute by minute during the learning process. Formative assessment, on the other hand, is a learning process and a learning partnership. Formative assessment provides students and teachers with the information needed to adjust teaching and learning while they are happening. And although benchmark assessments can tell teachers where students are in relation to the benchmark, the formative assessment process helps both teachers *and* students gauge student understanding all along the way.

Second, focus the teachers' attention on how the information from benchmark assessments is used compared with how formative assessment informs learning in real time—day to day and minute by minute in the classroom. Do benchmark assessments inform the learning for *current* students with the current learning target?

And, perhaps most important, help teachers see that benchmark assessments do not involve students in the assessment process. During formative assessment, students are intentionally involved as active self-assessors, goal-setters, and goal-getters. They need to be gathering information about their own learning process and progress. Formative assessment informs learning—it puts students in the driver's seat.

Reflecting on the Essential Elements of the Formative Assessment Process

Formative assessment is an intentional learning process that involves teachers and their students in an active partnership focused on improving achievement and generating motivation to learn. As you reflect on the kind of learning environment formative assessment will help teachers in your school create for and with their students, consider the following questions:

- Do both teachers and students intentionally focus on gathering evidence to inform student learning, or are teachers in charge of assessment efforts focused on auditing learning?
- Does everyone in the classroom share responsibility for learning, or is the teacher responsible for saying what has been learned, who has learned it, and what needs to be learned next?

- Are there classrooms where teachers and their students partner in the formative assessment process day to day and minute by minute? Are there classrooms where teachers are using one or two formative assessment strategies in stand-alone ways? Are there classrooms with little evidence of formative assessment? How can you encourage teachers to work together, share their thinking, and view each other as valuable resources as they individually and collectively work to improve the quality of the formative assessment process in their classrooms?

Summing It Up

The formative assessment process is lightning in a bottle! It costs nothing. You can help teachers put it to work for every age and grade level in every subject during each minute of every school day. This powerful learning process enhances the learning of those who are already excelling, jump-starts and sustains learners who are smoldering with potential, and increases student achievement for all students. What's more, formative assessment raises teacher quality and forges learning partnerships between students and teachers that make a huge difference in what happens every day and every minute in the classroom.

One word of encouragement and caution: Even lightning in a bottle takes time to impact the culture of a school. The formative assessment process, like any other reframing of what happens in classrooms, will take time to grow and develop. Keep in mind that it is a learning process for all learners in the school—the students, the teachers, and the administration. The good news is that when a school commits to creating learning opportunities like the ones we discuss in the remainder of the book, good things begin to happen immediately and multiply quickly. (Chapter 8 explores taking formative assessment schoolwide in greater detail.)

In the chapters that follow, we explore the six elements of the formative assessment process. Each chapter includes specific and practical strategies to help you give teachers both the research base and the how-to information that they will need to implement formative assessment in their own classrooms to increase student achievement and motivation to learn.

Chapter 2. Leveling the Playing Field: Sharing Learning Targets and Criteria for Success

The first step in formative assessment is being clear about learning goals. Actually, the first step in any kind of assessment is being clear about what it is that you want to know about. You may have heard this expressed as "identify outcomes" or in some other terminology used in your state or district. Simply put, if assessment is looking for evidence of something, you have to know what that something is.

For an external assessor, identifying outcomes is enough. For the classroom teacher, however, being clear about learning goals requires more than just identifying outcomes. For formative assessment, teachers not only must be clear about what they want students to learn (the lesson objective or intended outcome for students who "get it"); they also must know typical student steps and missteps toward this goal (the typical learning progression). This knowledge is necessary because what the teacher is looking for in formative assessment is evidence of where students are on their journey toward mastery of the learning outcome. To interpret student work that is on the way toward mastery, teachers need to be able to recognize typical and not-so-typical progress.

What Does It Mean to Share Learning Targets and Criteria for Success?

Sharing learning targets does not mean merely writing the objective on the board or telling students what the objective is in a sentence or two. Most students will, of course, be able to repeat back to the teacher what she said the objective was, and that can be somewhat useful. What we mean by sharing learning targets and criteria for success, however, is that students comprehend what those objectives mean. For example, a reading objective might be that students can identify the main idea in passages of a certain type and level. What we want is more than students being able to say "identify main idea." We want students to understand that they will learn how to get a better grasp on the meaning of what they read, why that should be a goal for them, and what it feels like to do that. For the student, this means both understanding the learning goal and knowing what good work on the assignment looks like. It's not a goal if the student can't envision it.

The single most important method for routinely sharing learning targets is using assignments that match—*really* match—the learning goal. It is in the assignment that the teacher translates the learning goal into action for the student. The student will strive to do the assignment, not the abstract goal. When we say an assignment or activity must "embody" the learning goal, we mean that the assignment or activity is such a close match with the goal that the student would be able to think, "If I can do [this assignment], then I can do [the learning objective]."

Teachers should always share their goals for students' learning—both by telling or writing the goals and by giving assignments and activities that embody them—and then check for students' understanding. It is not enough to ask students, "Do you understand?" They'll say yes, of course! Rather, teachers should use strategies that help assess students' comprehension of the meaning of learning goals and their comprehension of what good work looks like. Teachers should use this information to affirm understanding and clarify misconceptions.

How Does Sharing Learning Targets and Criteria for Success Affect Student Learning and Achievement?

One of the sweet moments in the life of one of the authors illustrates this question's point. Sue's adult daughter, newly on her own, asked Sue to make her a collection of the recipes that she had come to know and love (including Sue's apple pie and pot roast). Of course, it felt good to know that she associated these foods with home and wanted to take them with her to her own new home. But this homey story is a good metaphor for this chapter. Sue's daughter had a very clear picture of the intended outcome, based on her experiences of that pie and that pot roast over the years. She would compare her attempts to make these recipes with her sense of what they should taste like. Now, the pot roast was easy enough, but she had to practice several times to get the pie right. The point for this chapter is that if she did not have a concept of what "good" pie was, she would not have been able to shape her pie baking toward it, or at least not as effectively or efficiently.

Academic learning targets, although less concrete, work in a similar way. A vision of the end point makes the journey possible. So, for example, a 4th grade teacher might ask her students to write a book report. Her learning target, however, is not "write a book report." She wants students to be able to read and comprehend the plot of a chapter book and to be able to make a personal connection with the story. Therefore, she says, "Your book report should be two paragraphs. In the first paragraph, summarize the story so that someone who has not read the book would know what happened. In the second paragraph, tell what your favorite part of the story was, and why."

In so doing, this teacher has given clear directions. She has also made a start at sharing the learning target. All the students in her class may well understand what they are supposed to do. However, we can almost guarantee that there will be many different visions of what constitutes a good, clear summary of a book and an engaging description of one's favorite part.

What would help students envision the target more clearly? Showing students some good examples and having them discuss why they were good examples would help. Showing students examples of various quality levels and having them use comparison and contrast to order them and explain why some are better than others would be an even stronger strategy. Using rubrics with specific descriptions could help with either of these processes and would be a good default strategy if no examples were available.

Now the students are ready to start their book reports with a clear target in mind. They may use those rubrics and examples again, during their work, to self-assess. We will have more to say about student self-assessment in Chapter 5.

What Common Misconceptions Might Teachers Hold About Sharing Learning Targets and Criteria for Success?

Teachers are likely to hold at least two common misconceptions about sharing learning targets.

Misconception #1: Informing the students of the learning target by telling them what it is or by writing it on the board is sufficient. This is probably the most common misconception teachers might hold about sharing learning targets. Years ago, in a district where one of us taught, teachers were required to write their objectives on the board, and supervisors would observe to make sure the teachers did so. The assumption behind this practice is that writing the objective on the board puts the objective inside the students' heads. This is not a good assumption. Having students be able to recall or recite the objective is necessary but not sufficient for their understanding it.

Strategic talking points school leaders can use to address this misconception include the following:

- Most "lesson objectives" are written in language for teachers.
- Discussion about what a lesson objective means can help students express the objective in their own words and clarify the concept in their own minds.
- Students will understand best what a goal really means when they can see examples of good work.

Misconception #2: Sharing a rubric with students will ensure they understand the criteria for success. Sharing a rubric with students is a good start, but as with the objective, you need to check for student understanding of what the criteria mean. Some criteria are easy to understand—for example, "use at least three sources of

information"—but things you can count are not always at the heart of a learning goal. Some criteria require the students to have more abstract, but arguably more important, concepts. Using the context of writing, for example, a rubric for "voice" might say, "Conveys a sense of the person behind the words." Reading that phrase does not mean students will necessarily recognize writing that conveys a sense of the person behind the words when they see it. Some students will need to be taught how to distinguish writing that does this well and less well.

School leaders who observe teachers writing the objective on the board without any discussion or follow-up with students might want to talk with those teachers to determine if they, in fact, believe this is a sufficient method for sharing learning targets. Similarly, school leaders who observe teachers passing out rubrics and moving on with the assumption that students can use them might likewise talk with those teachers.

Strategic talking points school leaders can use to address this misconception include the following:

- Rubrics are a good starting point because they organize the criteria for students into levels of description about various aspects of the work.
- You can find out how students comprehend what the descriptive levels of a rubric mean by asking them to state them in their own words.
- Students can learn to more precisely identify levels of quality when they see them by looking at examples of work.
- Students who can identify quality levels in sample papers are better at self-assessment and at producing desired levels of work themselves.

What Is the Motivation Connection?

Students who have clear pictures of the learning target and of the criteria for success are likely to also have a sense of what they can and should do to make their work measure up to those criteria and that goal. Clear learning targets direct both teachers *and students* toward specific goals. Students can meet goals only if they are actually working toward them, and they can't work toward them until they understand what they are.

Once students understand where they are headed, they are more likely to feel that they can be successful, can actually reach the goal. Students' belief that they can be successful at a particular task or assignment is called self-efficacy (Bandura, 1997). Students who have self-efficacy are more likely to persist in their work and especially more likely to persist in the face of challenge (Pajares, 1996).

When students feel that they understand the criteria by which their work will be judged, they also have some sense of control over their work and are poised to be strategic self-regulators. If I, the student author, understand that a good story needs a sense of voice that engages readers and makes them feel like I am a real person communicating with them, and if I (or someone else) read my story and find it flat and wooden, then I know I have work to do—and, more important, I know *what* work I have to do. That student decision ("My story lacks a vibrant voice, and I should revise it for that reason") is an example of self-regulation.

Notice that it takes both an understanding of the learning target (what "voice" is in writing) and an understanding of the criteria for success (recognizing writing with effective use of voice when we see it) to foster self-efficacy and self-regulation. If students understand the learning target but don't know what qualities will get them there, they are likely to feel discouraged.

What Are Specific Strategies I Can Share with Teachers?

Teachers can help students understand learning targets by the same means they use to help students understand anything: telling, showing, or discovering. "Telling" methods were popular for a while. The classic in this category is for teachers to write their lesson objectives on the board. This method is certainly better than not mentioning the learning target, which makes it a guessing game ("I wonder why we're doing this?"). But, as noted earlier, a problem with this method is that lesson objectives are often expressed in teacher language—for example, "The student will be able to do three-digit subtraction with borrowing." True sharing of learning targets involves getting students to

comprehend what the learning target entails. As we have already said, many students, having read this objective on the board, could repeat it back but not tell you much about what it meant.

In this book, we concentrate on ways to share learning targets and criteria for success by showing this information to students or by having students discover this information for themselves. Directed student conversation can be a powerful way for students to develop comprehension of their learning target. Strategies that put information in written form enable teachers and students to review and refer to it. Both oral and written strategies are ways to get what's inside a student's head out into public space so that others can hear it or read it and respond. Figure 2.1 summarizes the strategies that we discuss in the following sections.

Figure 2.1. Strategies for Sharing Learning Targets and Criteria for Success

General Strategy	Specific Tactics	Examples
Questioning	Teachers check for understanding by asking for student questions or by asking students to put learning goals in their own words.	*Kevin, can you tell me one thing about the water cycle you already know? … Jacob, can you tell me one other thing about the water cycle? … Jaden, can you put those two things together so we have a definition of the water cycle?* *Why is it important to know about the water cycle?* *What would a good report on the water cycle look like?* *Donna, what do you think of Matthew's idea about the way to do a picture of the water cycle?* *How long would the report have to be to show you really understood the whole water cycle?*
	Teachers use directed discussion or warm-up questions.	
	Students think-pair-share what they think they will be learning, why it's important, and how it relates to previous learning.	
Planning and Envisioning	Students list what they know and want to know.	*Groups working on water cycle reports plan a week of work, including library research, reading, writing, drawing, editing, and planning a presentation.* *Students use these planning charts to keep track of progress. The teacher uses these planning charts for interim assessment of student progress and for asking questions about what students learn along the way.* *The teacher asks for interim assessments as checkpoints along the way—for example, a list of sources after library day, an outline as the report is planned, a draft as the report is written, a list of students' roles for an oral presentation.*
	Students make planning charts for individual or group work.	
Using Examples	Students look at good examples and make a list of what makes	*Here are the five best water cycle reports from last year. What do you notice about them?*

	them good.	*Can you organize these things you notice into categories?*
	Students look at a range of examples, sort them into quality levels, and write descriptions of the levels that turn into draft rubrics.	*Put these water cycle reports into three piles: Good, OK, and Not Good.* *What makes the Good ones good? How are the OK reports different from the Good ones? From the Not Good ones?*
Using Rubrics	Students use teacher-made rubrics to assess examples.	*Here are some water cycle reports from last year. Discuss with your group how you would evaluate them using this rubric, and why.*
	Students rephrase teacher-made rubrics into their own words.	*Here is the rubric we will use for your water cycle reports. How would you describe these qualities to another student?*
	Students use rubrics to assess their own work and revise.	*How do you think your water cycle report measures up on this rubric? Use a highlighter to show the descriptions in the rubric that you think describe your work. Is there anything you want to revise?*

Questioning

Questioning, along with directed conversation, is one strategy for communicating learning targets. The strategy can be simple or elaborate, depending on the particular students and content. Sometimes all that is needed is that a teacher ask students what questions they have about an assignment. Listening to these questions can provide the teacher with some information about what the students think they are to do and what they are to learn.

A variation on simple questioning as a strategy to communicate the learning target is for the teacher to describe a lesson's target and an assignment or activity that embodies it and then to ask students to repeat what she said in their own words. Putting something in one's own words is a classic comprehension activity. In so doing, students will show how they are understanding what the teacher is asking them to do.

A slightly more complex version of this questioning strategy is to use a think-pair-share activity. The teacher can have pairs of students (1) explain what they think they are going to learn, in their own words, (2) explain why they think it is important, and (3) figure out at least one previous lesson topic this goal is related to. In whole-class discussion, the pairs share and discuss their answers and come to a class consensus for the three questions (*What are you going to learn? Why is it important? What previous lesson topic is this goal related to?*). The purpose of the third question is to explicitly help students see that they are building knowledge and skill and to activate relevant prior knowledge that they can then use as they work.

Sato and Atkin (2006/2007) report on a version of this activity that they call "warm-up questions." The teacher prepares warm-up questions that review the previous lesson or preview the coming lesson. As students respond, the teacher asks students to comment on their peers' ideas and clarify or extend them. This directed discussion brings students' ideas about the learning target out into the open, where they can be examined and focused until everyone is clear on what the upcoming lesson is going to be about. An important feature of this strategy is that the teacher should discuss with students what high-quality responses to these questions would sound like. Students will not immediately be good "clarifiers and extenders." This skill needs to be developed.

When teachers use questioning as a strategy for clarifying a learning target, they should ask students about their attitudes and experiences as well as their knowledge. Teachers can ask students to describe what prior school or other experiences and what attitudes and feelings come to mind, as appropriate to the topic. They can assess students' responses for relevance and then use the information for adjusting instruction. For example, many elementary school students study recycling as a community activity or as part of a science unit. It would be useful to know which students come from homes where recycling is an important activity, what they do at home to recycle, and why their parents have told them they are doing it.

Planning and Envisioning

For some learning targets, having students envision what they know and what they will know (or do) can be a good way to give them a picture of what their learning will be about. The *K* and *W* columns ("know" and "want to know") of a KWL chart are classic examples of this strategy for clarifying learning targets.

For younger students, teachers can use actual pictures that are images for "what we will do" or "what we will need" (for example, a crystal ball might represent what they think an assignment will be about, and a tool box might represent the supplies they think they will need). Dictated or student-written words can be added to the pictures in appropriate places. Colored pictures can be used as cover sheets for folders of work, as appropriate.

For older students doing project work, planning charts for individual or group work can help clarify the learning target. Students must identify what needs to be done before they can plan how to do it. Such planning charts help more with the logistical aspects of the work than with understanding concepts, but they can be important steps along the way.

Using Examples

Giving students examples of work to review and describe helps them discover and develop conceptions of the learning target and criteria for good work by induction. If possible, teachers can use real examples from previous years from anonymous students. If no real examples from previous students are available, teachers can construct examples to illustrate the range of possible performance. If a teacher is using a rubric, it should include at least one example per level; two is better at the common levels of performance. For learning targets involving higher-order thinking, the teacher should try to have these represent levels of quality rather than quantity, so students will have to explain characteristics of the work rather than just say things like "You wanted three sources, and this paper only has two."

For some learning targets, a good source of anonymous examples that range in quality from excellent to poor is the National Assessment of Educational Progress released items, available at http://nces.ed.gov/nationsreportcard/itmrls/. Use the Questions Tool to bring up released items and examples of student work. Be sure to select "constructed response" (that is, not multiple-choice items) so there will be student work associated with the writing prompts, math problems, or social studies and science questions.

Students can discuss the qualities of the examples and arrive at a description of what good work looks like. If the teacher gave students a rubric, students can come to consensus on where each example would fall on the rubric, and why.

If the teacher has not given students a rubric, students can sort the examples into piles, come up with a description of each pile, and thus develop their own draft rubrics. For example, students can sort examples of work into "Good," "OK," and "Not Good" piles and then describe the characteristics of each. Teachers can use the student-generated rubrics as is or edit them as necessary. Even 1st graders can create rubrics in this way. Research suggests young children's first attempts at rubrics might give neatness and appearance too much weight and substance too little weight (Higgins, Harris, & Kuehn, 1994), but even this can make a teachable moment.

One of us met a teacher in Nebraska who had used the strategy of providing examples and "created a monster," as she said with a smile. Each year, her middle school science students created a notebook about the material they were studying. She decided to save some of the good science notebooks to use as examples, with student permission, of course. She found her students were eager to have her use their work as good examples. However, by

her third year of using this strategy, she found that each year the notebooks were better than the year before. Students would look at the examples, figure out what the previous students had done, and go one better. The notebooks developed to be not only longer but also more substantive, because using examples made it easy for students to envision what could be done.

Sharing only good examples helps students envision a target. Sharing a range of examples, from good to poor, allows students to develop a conceptual understanding of the criteria. In the Nebraska example, if the teacher had shown students some mediocre and poor notebooks, too, the students would have had more opportunity to discuss the criteria. However, identifying a student's work as "not a good example" is something some teachers are reluctant to do, for the sake of the student. For a range of examples, it is best to use examples from anonymous sources or teacher-created examples.

Using Rubrics

The strategy of using examples often involves rubrics—either ones the teacher has provided or ones the students generate from the examples. Even if examples are not available, however, rubrics can help clarify learning targets in students' minds and help them understand the criteria for success. In some cases, student translations of teacher rubrics into what is sometimes called "kid-friendly" language can be helpful as well.

Teachers can also use rubrics to clarify learning targets through opportunities for revision, if appropriate. Students can review their own work against rubrics, decide what needs to be revised for improvement, and then do that before they turn in the work. Alternatively, the teacher can allow "not acceptable" papers or projects to be redone, although it is usually better for students to revise work before they turn it in for a grade. That makes them, and not the teacher, the arbiters of their revisions. Some teachers have students do peer review and revision. We advise that even if teachers incorporate peer review into their students' work time, they also allow for self-assessment. Peers can make helpful suggestions, but it is the students' own decisions about their work that lead to learning.

How Will I Recognize Effective Sharing of Learning Targets and Criteria for Success When I See It?

First, ask students. Probably the most accurate marker of classrooms where learning targets and criteria are shared effectively is that students can explain, when asked, what it is that they are supposed to do, and why.

Second, observe teachers. Look for evidence that the strategies described in the preceding sections—questioning, planning and envisioning, using examples, and using rubrics—are being not only used but used well. In particular, look for the following:

- Are students asked to put the learning targets (or lesson objectives) in their own words?
- Are students asked to talk about their ideas and previous experiences related to learning targets?
- Does the teacher listen to student visions of their work, and, more important, does the teacher use that information in some way?
- Are students encouraged to plan their work, and do they have opportunities to implement those plans?
- Do students have an opportunity to review and respond to examples of work?
- Does the teacher use rubrics formatively—that is, to shape work, not just to grade it?

Learning to recognize the ways that teachers and students share learning targets requires systematic observation based on a clear understanding of the many effective ways this sharing can happen. Such observation can also help you uncover areas for professional growth that can guide your conversations with teachers about the critical importance of sharing learning targets and the criteria for success. The exercise presented here—a shared learning targets case study—is a three-tiered process for gathering sound evidence through a classroom walk-through (see Figure 2.2), a lesson plan/assignment walk-through (see Figure 2.3), and a student outcome walk-through (see

Figure 2.4), followed by documentation of conclusions and determination of goals and strategies (see Figure 2.5). The exercise will help you document the ways teachers are clearly communicating the learning target and criteria for success and how students are using that information to learn how to learn—to become confident and competent self-regulated learners. Although the case study format is designed to assist a classroom walk-through, you can also use it to guide a more comprehensive formal classroom observation.

Figure 2.2. Tier 1: Classroom Walk-Through for Sharing Learning Targets

Document the ways the teacher communicates learning targets and the criteria for success/elements of quality with students. You can use notes to expand on your observations.			
The teacher used the following communication modes to share the learning targets and criteria for success/elements of quality:			
❑ Oral	❑ Written	❑ Displays	❑ Demonstrations/ modeling
The teacher used the following formats to share the learning targets and the criteria for success:			
❑ Rubric	❑ Contract	❑ Checklist of expectations and requirements	❑ Anchor papers, models, or other exemplars of quality
When did the teacher communicate the learning targets and the criteria for success?			
❑ Before instruction	❑ During instruction/ongoing	❑ At the conclusion of instruction	
How did the teacher help the students to understand the learning targets and the criteria for success/ elements of quality?			
❑ Conducted discussion and review	❑ Discussed criteria, rubrics, checklists	❑ Showed student work, modeled responses, examined exemplars or anchors of quality	
❑ Helped students apply the criteria to their own work or to a model	❑ Involved students in generating criteria/elements of quality	❑ Provided feedback to students that focused on the learning target and the criteria for success	
In what ways did the teacher engage the students in applying the criteria for success/elements of quality?			
❑ Helped students compare their work to anchors or exemplars	❑ Helped students identify anchors or models based on the criteria	❑ Used rubrics, checklists, or other tools to assist in assessments of quality	❑ Helped students develop criteria for success/elements of quality
In what ways did the teacher engage the students in developing/identifying criteria for success and/or elements of quality?			
❑ Brainstormed/discussed criteria	❑ Discussed elements of quality directly related to the learning target and performance task/product requirements	❑ Discussed elements of a quality answer, paper, response, *A* work	

Figure 2.3. Tier 2: Classroom Walk-Through for Lesson Plans and Learning Activities on Sharing Learning Targets

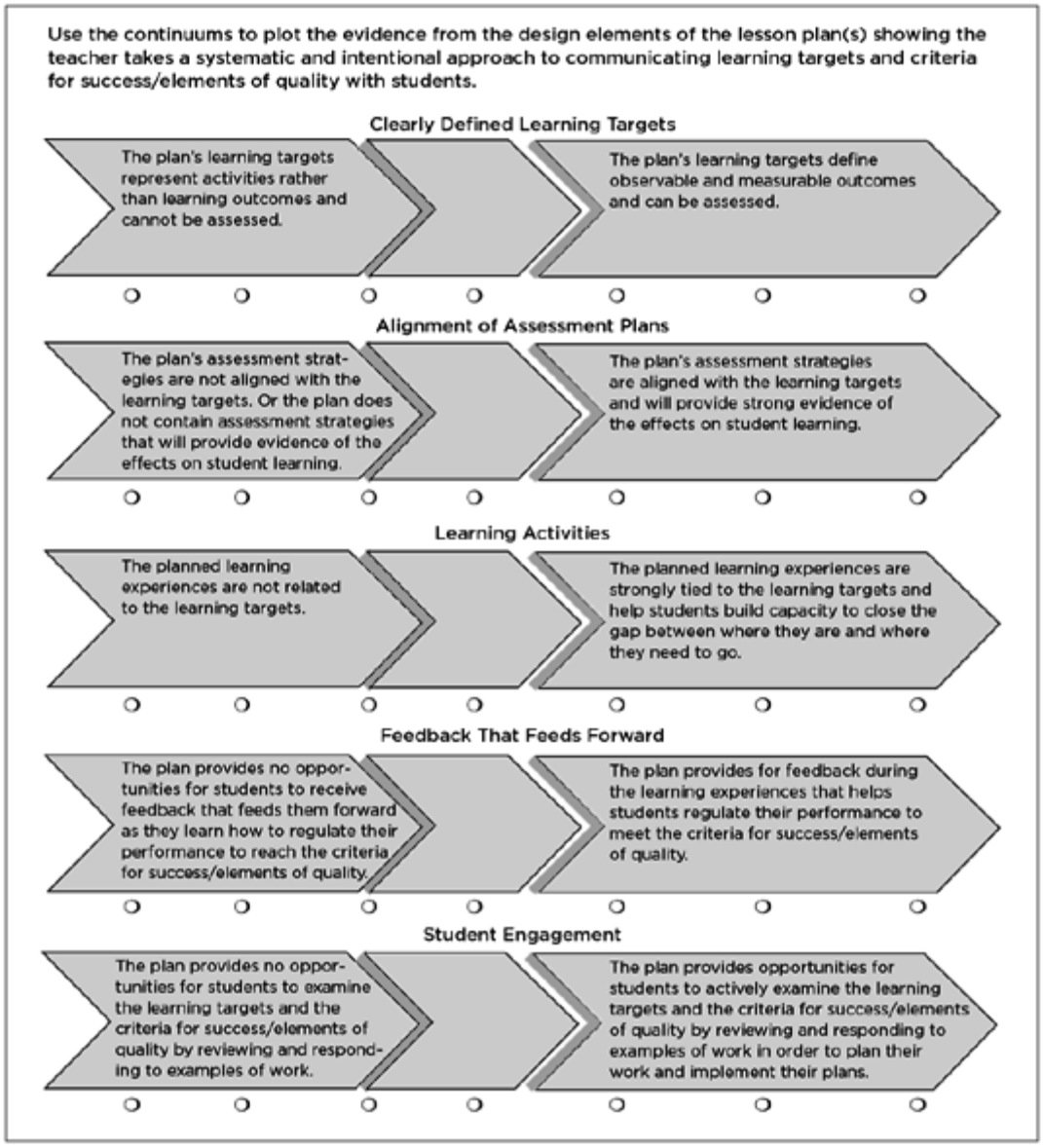

Figure 2.4. Tier 3: Classroom Walk-Through for Student Outcomes on Sharing Learning Targets

Document the student outcomes that provide strong evidence that the teacher communicates the learning targets and the criteria for success/elements of quality with students.

Ask three students the following question: ***What are you learning in this lesson?*** **Then check all that apply:**

- ❑ **Students describe what they are doing rather than what they are learning.**
  Examples: ***We are writing papers. We are working problems. We are finishing our projects.***
- ❑ **Students describe what they are learning in general terms.**
  Examples: ***We are learning about weather. We are learning math. We are learning about dogs.***
- ❑ **Students provide a clear and accurate description of what they are learning.**
  Examples: ***We are learning to write a topic sentence. We are learning the functions of the circulatory system.***

Ask three students the following questions: ***Are you doing well (or doing a good job) on this task? How do you know?*** **Then check all that apply:**

- ❑ **Students cannot describe the criteria for success/elements of quality.**
  Examples: ***I don't know. I will know when I see my grade. I will ask the teacher for help.***
- ❑ **Students describe a general strategy for assessing the quality of their work.**
  Examples: ***I will do a good job if I follow directions; answer all the questions; do my best.***
- ❑ **Students describe specific strategies for assessing the quality of their work.**
  Examples: ***I use the steps in the chart. I refer to the rubric. I look at the examples of good work. I use the checklist. I try to make mine like the model the teacher gave us.***

Examine student products connected to the lesson. Then check all that apply:

- ❑ **The lesson will not result in student products that can be assessed for learning progress toward the learning target.**
- ❑ **The students will produce work that has minimal to no connection to the learning targets.**
- ❑ **The students will produce work that provides strong evidence of their progress toward the learning target.**
- ❑ **Students will have the opportunity to incorporate feedback or use tools (rubrics, checklists, etc.) to refine and revise their work in order to meet the criteria for success/elements of quality connected to the learning target.**

Examine the homework assignment connected to the lesson. Then check all that apply:

- ❑ **Homework assignments are strongly connected to the learning targets.**
- ❑ **Homework assignments are paired with a way for students to judge the quality of their work.**
- ❑ **Homework assignments will help students close the gap between where they are in relation to the learning target.**

Ask the teacher the following question: ***In this lesson, how do you share the learning targets and criteria for success/elements of quality with your students?*** **Record the response.**

Figure 2.5. Conclusions and Goal Setting for Learning Targets Case Study

1. Based on the evidence you gathered through the three-tiered Learning Targets Walk-Through, what are your conclusions regarding the quality, consistency, and effect of the ways the teacher shares the learning targets and success criteria in order to inform student learning and increase student achievement?

2. Based on your conclusions above, what are three specific goals that you have for this teacher?
Goal 1:
Goal 2:
Goal 3:

3. Given the professional goals above, state three specific strategies you can share to help the teacher become more effective at sharing learning targets and the criteria for success.

Strategy 1:
Strategy 2:
Strategy 3:

How Can I Model Effective Sharing of Learning Targets and Criteria for Success in Conversations with Teachers About Their Own Professional Learning?

Teachers should have the same clarity about your goals for them as you expect them to have about their goals for students. Often teachers are given professional development expectations without a clear idea of what it is they should "develop." We also know that professional learning goals for teachers can be more or less thoughtful. One of us once did some work in a high school that required teachers to submit professional development goals and plans at the beginning of the year. One teacher wrote "be more professional" as his goal, and as evidence, he was going to count the number of days he wore a tie to school. Sadly, this really happened.

The first tip for learning targets for teacher professional development is to base them on individual teachers' needs—or better, to arrive at mutually agreed-upon professional development goals based on your observations, the teacher's reflections, and joint conversation about the goals. If a goal is partly the result of teacher self-assessment, all those motivational benefits about feelings of control and being the agent of one's own destiny will kick in.

Communicate with the teacher not only what you think the professional development goal should be but also what evidence makes that an important goal. One of the questioning strategies we described earlier is a good one to use. Simply asking the teacher to describe what it is she wants to improve, in her own words, and what she plans to do about it will go a long way in most cases to making sure that the teacher understands the goal and that the teacher knows you know she understands the goal.

Following right along, let the teacher know what you will interpret as evidence that the goal has been met and what criteria you will use. It would be even better if the evidence and criteria could be arrived at jointly, in conversation. Remember that conversation is a means by which the thinking in one person's head can be brought to light so that others can reflect and comment. Conversation in this sense is a real give and take, not a grilling or a lecture. Conversation is also the means by which people indicate their understanding of whatever they are talking about. So talking about evidence and criteria with the teacher may actually serve as a means to clarify ideas for both you and the teacher.

What If?

Communicating learning targets involves teachers and students. Teachers must have a clear conception of the target, send clear messages about it, and provide clear opportunities for students to develop the concept. Like teachers, students have to be able to understand and work with the concept behind the learning target. *What if you ask a student to explain the learning target he is working toward and the student can't come up with an answer?*

First, gather additional evidence. Is it one student who cannot express a clear concept of the learning target, or are many students in the same boat? Does the teacher know that this student doesn't understand, or does she assume he does? In short, try to determine if the issue is that the teacher needs to take a differentiated approach with one or a few students, or if the lack of understanding represents something more wide-ranging. If it's one or a few students, talk with the teacher about strategies for individualizing learning.

If many students cannot say what the learning target is, gather some additional evidence and do some triangulation. Look at three different sources. What do the teacher's lesson plans say the learning target is? When asked, what does the teacher say it is? What do the lesson activities and assignments imply that it is? If these three do not agree, there's the problem: there is no clear learning target. Start there with the teacher, focusing on how to develop good learning targets (Gronlund & Brookhart, 2009). Talk with the teacher about the importance of coherence in planning,

instruction, and assessment. Sometimes that is all it takes. For example, a teacher may have grabbed a worksheet that looked like a match— maybe it was about the same topic, for example, butterflies—without analyzing the work required to make sure it dealt with the same specific concepts or required the same thinking skills. Sometimes teachers need practice at analyzing what really is required of students in an activity or assignment, and you can work on that.

And finally, sometimes the three sources of information do agree, but they describe activities, not learning targets. For example, the teacher may say, "We're doing posters about Canada," without having a clear sense beyond that. Of course, then the students would probably have said, "We're making posters," instead of being able to state the learning goal. Is the goal to learn facts about Canada? To understand the relationship between the United States and Canada? To understand interdependencies among two countries in North America? Something else? In that case, explore with the teacher how activities and assignments should be instances that embody the learning target, selected from a group of possible activities and assignments in service of the same knowledge or skill. In our experience, you will run into this issue a lot. Many teachers use activities as a shorthand for learning goals, which unfortunately will have the effect of limiting learning.

Reflecting on Sharing Learning Targets and Criteria for Success

There is no more foundational activity for a school leader than making sure that there are clear learning targets aligned to whatever standards are in place in the school or district, that teachers understand them and teach to them, and that students understand them and reach for them. Reflect on these questions for your school or district:

- Are there classrooms where students understand their goals particularly well? Conversely, are there classrooms where activities just seem to happen to get "done"? What are the differences in how students work and how they behave in those two types of classrooms?
- Do some teachers struggle with the concept of a "learning goal"? With the idea of an activity or assignment tapping into that learning goal in a deep way? For those teachers, what is the level of their own content knowledge and of their knowledge of typical student learning progressions for that topic?
- Do you observe a range of student behavior in the classrooms in your school? Is there any relationship between the number and type of behavior problems in a class and the clarity of student understanding and teacher communication of learning goals?

Summing It Up

In this chapter, we have talked about the foundation of formative (and summative, too, for that matter) assessment—clear communication of learning targets and clear understanding of the criteria for success. In fact, it is this characteristic— that they are both based on the same learning goals—that relates formative and summative assessment in education. We have discussed strategies teachers might use to share learning targets and criteria with their students. After that point in most lesson sequences, the students get busy and do some work. In Chapter 3, then, we turn to ways to give feedback to students on that work so that their learning can continue to progress.