9

Looking for Student Self-Assessment

Does the lesson involve students in using a learning target and look-fors to self-regulate their own learning?

Students who can assess and regulate their own learning—who can answer the three central questions of the formative assessment process (*Where am I headed? Where am I now? How can I close the gap between where I am now and where I need to go?*)—are more successful than students who cannot. In fact, the ability to use self-assessment information to regulate one's own learning and behavior is a strong predictor of future academic and professional success (Bandura, 2008; Ormrod, 2011).

What Is Student Self-Assessment?

Student self-assessment is one of the mechanisms for student self-regulation. Zimmerman and Schunk (2011) define self-regulated learning this way:

> Self-regulated learning and performance refers to the processes whereby learners personally activate and sustain cognitions, affects, and behaviors that are systematically oriented toward the attainment of personal goals. By setting personal goals, learners create self-oriented feedback loops through which they can monitor their effectiveness and adapt their functioning. Because self-regulated persons must be proactive in order to set goals and engage in a self-regulatory cycle, supportive motivational beliefs are also essential. (p. 1)

Self-regulation makes an important contribution to the depth and quality of student understanding. Variation in self-regulation is one of the reasons for differences in student achievement, and self-regulation is an effective way to help learners at all levels to improve (Zimmerman & Schunk, 2011).

Self-regulation of learning relates to our learning target theory of action because a learning target only becomes a target when students are aiming for it. Students who are aiming for a goal—who have made it their own—can and will "activate and sustain" the thinking, beliefs, and actions that will move them toward their learning goal. This principle, in fact, is what supplies the energy behind our learning target theory of action. If students are truly aiming for a learning goal, they will use self-regulatory processes. If students are only complying with teacher directions, if they are just "doing what they are supposed to do," they will not call upon self-regulatory processes.

Teachers cannot do the learning for their students. In fact, it isn't learning unless the students do it. However, teachers can put in place the means, the motive, and the opportunity for students to apprehend the learning targets as personal goals. Students can help get themselves to the learning target if teachers let them in on the target, the performance of understanding, and the look-fors. Teachers should also teach students strategies to help them self-assess their work on the lesson's performance of understanding and strategies to help them take the long view about adjusting their learning.

What is the relationship between self-regulation and motivation?

Self-regulation of learning can be divided into four phases: forethought and planning, monitoring, control, and reaction and reflection (Pintrich & Zusho, 2002). Each phase is associated with different aspects of cognition, motivation, behavior, and context. For example, when a student is planning for learning, motivational features such as goal orientations (*Why am I learning this?*), judgments of self-efficacy (*How sure am I that I can learn this?*), perceptions of task difficulty, and interest affect the student's plans.

Teachers' expectations for students' learning and their instruction and assessment practices also affect students' planning for learning, their monitoring and control, and their reflection (Andrade & Brookhart, 2014)—their quest for the learning target, if you will. Thus teachers and students are "in it together" in the learning process. The actions of the one affect the motivation

of the other. Teachers who support student self-assessment help students be more effective regulators of their own learning. This is "learning how to learn" (James et al., 2006).

In the formative learning cycle, the four phases of self-regulation look like this: (1) students set personal goals, (2) students assess their own progress toward the goal, (3) students interpret assessment information to decide where they are in relation to the goal, (4) students make changes to their learning processes or revise their work products. The process itself is motivating because it gives students agency and ownership for their own learning.

How do teachers motivate students?

Our discussion of student self-regulation of learning should help you see that students' motivation to learn is driven by their own intention to learn something; the expectation that they can learn it; and willingness to try, monitor and adjust, and persevere until the learning goal is reached. Teachers who try to motivate students by using external rewards and punishments short-circuit this source of learning energy.

It is true that receiving a reward for an action usually increases the likelihood that the action will be repeated; and when rewards are used and monitored carefully, they are usually effective. However, if rewards are used with tasks students would have done anyway, the rewards are likely to undermine motivation, interest, and students choosing to participate in the task (Deci, Ryan, & Koestner, 1999). The following scenario illustrates the point.

> **Scenario 9.1** Every day for the last four months, a middle school math teacher has given her students daily rewards in the form of stickers during their math lesson. Students can place their stickers on charts displayed in the room. The teacher hands out the stickers after she checks their papers for accuracy.
>
> This teacher is using external reinforcement on a daily basis and is not using it as a means to an end—developing students who are intrinsically motivated and who can self-assess and self-regulate. Her actions continue to tell her students that learning is something that teachers assess and correct and that they cannot assess and regulate their own learning.

In general, then, external rewards—stickers, candy, free time, and so on—work only while a student is under a teacher's control. They are best used with learners whose level of intrinsic motivation for a task is initially quite low (Hidi & Harackiewicz, 2000). These outside rewards should be used to intentionally foster intrinsic motivation and should be a means to an end rather than a daily classroom practice. Once interest is piqued or some level of success with the task is achieved, rely on students' own internal motivation to move them toward the learning target. Learners engage in an activity for the good feelings they get from engaging in it—accomplishment, pride, increased positive self-efficacy—what we can call "the love of the game."

What Does a Self-Regulated Learner Look Like?

Self-regulated learners put on their thinking caps. They set goals, knowing what they want to accomplish when they read or study. They control their attention, focusing on the content and task at hand and clearing their minds of thoughts and emotions that might distract them. They self-motivate, reminding themselves of the importance of doing well, or promising themselves a reward when they are finished. They are flexible, choosing the best learning strategy for the task at hand.

Self-regulated learners self-monitor, continuously comparing what they are doing to their look-fors and using that information to modify their strategies as necessary. They ask for outside help, recognizing when they need help and having the language they need to ask for the specific kind of help that will allow them to work more independently in the future. Finally, self-regulated learners self-assess, continuously using the evidence they gather to compare their understanding and their work to the learning target. They determine whether the work they are producing fulfills the learning goals they set for themselves.

Self-regulated learners believe that they are able to succeed at a particular task. This is called self-efficacy. Self-efficacy beliefs are powerful and they are learned. Teaching students to read, write, do math, think like a scientist, or do anything well means helping them learn that they are capable of doing it well. Self-efficacy is task and situation specific (Pajares, 2006). For example, a learner may have high self-efficacy for writing a letter to a friend but low

self-efficacy for writing a research paper. A learning target theory of action helps teachers promote self-efficacy by giving students the tools (the target, the performance of understanding, and especially the look-fors) they need. When students understand that they have everything they need to succeed, self-efficacy rises. Thus a learning target theory of action helps teachers promote self-efficacy, self-regulation, and self-assessment during a formative learning cycle. Let's illustrate this with two examples.

Scenario 9.2 High school students in two business law classes are learning to construct and deliver a compelling closing argument that will sway a jury in a civil litigation case.

In Classroom A, Mr. Smith uses a PowerPoint presentation to tell his students the important parts of a closing argument in court. Students listen intently and copy notes from the presentation into their notebooks. At the end of class, Mr. Smith will collect and grade the notebooks.

In Classroom B, Mr. Jones shares the following list of look-fors students can use to judge the quality of a closing argument:

- Begins with a greeting of the jury.
- Uses an attention-grabber to engage the jury.
- States the position of the party you are representing (plaintiff or defendant).
- Uses detailed, concrete facts from testimonies of various witnesses.
- Applies relevant research to support the party you are representing.
- Identifies and applies the required elements of the Tort of Negligence.

Mr. Jones uses the language in the checklist to explain and give examples of a quality closing argument. Then he shares video clips of closing arguments from movies and asks students to use the checklist of look-fors to critique the quality of each argument using evidence from the movie clip.

What can the students in Classroom A do to set a specific learning goal and regulate their learning and work? What kinds of questions would you

predict they would ask during the lesson when they need help? Because there is no performance of understanding and nothing for them to look for, most students set a goal of copying the notes accurately and neatly. Their questions would tend to be about the mechanics of the assignment—copying the notes—rather than about the quality of their understanding.

In Classroom B, students focus on applying specific look-fors to learn to judge the quality of a closing argument. In doing so they both deepen their understanding of what it takes to deliver a compelling closing argument and produce evidence that they can see and assess how well they understand it. In Classroom B, students are getting themselves to the learning target. The look-fors and the performance of understanding provide them a specific way to assess both the quality of a closing argument and their own understanding. They have the specific language of the look-fors to use to frame strategic questions that will help them clarify and deepen their understanding (e.g., "Does that research he's quoting really support the point he is trying to make?").

When students set specific goals for the lesson and have things to look for during a performance of understanding, they become goal-getters. They learn to monitor their thinking and their work and to feed themselves forward. In other words, they self-assess and self-regulate.

Mr. Doug Aftanas, who teaches business law at Norwin High School in the Norwin School District in Pennsylvania, understands what it means to help students become assessment capable—that's why we adapted one of his lessons to create the scenario in Classroom B.

How Do Teachers Develop Assessment-Capable Students?

Student self-assessment is the number-one educational factor that raises student achievement. Visible learning happens "when teachers SEE learning through the eyes of the student and when students SEE themselves as their own teachers" (Hattie, 2009, p. 238, capital letters in original). Each lesson should give students self-assessment opportunities, and students should use these opportunities to become more assessment capable. Student self-assessment is a key element in self-regulation. It requires that students understand what the learning target is for today's lesson. It also requires that students be able check their progress toward that learning target.

Teacher regulation and student compliance are not enough. When only the teacher knows the learning intention of the lesson, students cannot self-assess or self-regulate. The teacher uses his energy trying to get students to the point of understanding in the lesson. Students spend their energy figuring out what the teacher wants them to do and complying with it. It doesn't matter what you have written on the board. A learning intention becomes a learning target only when both you *and* your students aim for it and assess progress toward it. So what does this look like?

How Will I Recognize Quality Student Self-Assessment?

Quality student self-assessment happens when students are working in a self-regulatory way. Teachers who promote student self-assessment use a learning target theory of action and teach students to become self-regulated learners. Figure 9.1 presents a Collaborative Inquiry Guide for Student Self-Assessment. Let's apply this guide to an example.

Scenario 9.3

Context: A 9th grade teacher is helping her students identify the essential elements of a fairy tale. She provides students the following learning target and look-fors.

The learning target: We are learning to identify the five elements present in all fairy tales.

The look-fors: The teacher shares the look-fors in the form of an annotated checklist, noting that a story is a fairy tale if it contains all the following elements:

- A good character—the character is all-the-way-good and has no malice. The character can be non-human and there can be more than one of them in some tales.
- A bad character—the character is all-the-way-bad, wicked, or evil. The character can be non-human and there can be more than one of them in some tales.
- Creatures—these are non-human characters. Sometimes they are personified and sometimes they are not. They can be good or evil. Some tales have both good and evil creatures.

Figure 9.1 | **Collaborative Inquiry Guide for Student Self-Assessment**

Student self-assessment requires that students have set a personal learning goal, that is, that they have made the learning target their own, and are taking self-regulatory steps to reach the target. Teachers can scaffold the self-assessment process by using a learning target theory of action and giving students help along the way

Look for elements that promote student self-assessment in today's lesson	**Yes**	**Somewhat**	**No**
Does the teacher share the learning target and look-fors throughout the lesson? *Explain your choice:*			
Does the teacher use the language of the look-fors to think aloud and feed students forward? *Explain your choice:*			
Does the teacher use the language of the look-fors in his/her feedback? *Explain your choice:*			
Could the look-fors be used for more than one performance of understanding? *Explain your choice:*			
Do students have rubrics and/or checklists to use? *Explain your choice:*			
Does the atmosphere of the class promote the idea that high-quality work takes effort over time? *Explain your choice:*			
Are students required to self-assess as part of today's lesson? *Explain your choice:*			
Do students receive feedback on the accuracy and fairness of their self-assessments? *Explain your choice:*			
Does the teacher help students set realistic next-step goals? Does feedback include a strategy for growth? *Explain your choice:*			
Is self-assessment scaffolded for all learners? Is incremental challenge and support available for every student? *Explain your choice:*			

- Magic—Appears in a fairy tale in three ways: 1) In some stories it is used only for evil; 2) In some stories it is used only for good; 3) In some stories it is used for both good and evil.
- The "Happily Ever-After"—The good character(s) must overcome a challenge involving the bad character(s) within a world where there is magic. The ending of that challenge is always happy and positive.

The performance of understanding: In groups of four, the students analyze scenes from the movie *The Wizard of Oz* as an example of a more modern fairy tale and read "The Gingerbread Man" as an example of a classic fairy tale. Using both examples, the students look for the five elements, apply the definitions, and discuss those parts or characters in each tale that embody more than one element. They must support their conclusions with excerpts from the movie or text. The teacher provides oral feedback to the groups as they are working and encourages them to support their reasoning by asking them "Why do you think that? What is your evidence?"

Applying the guide, the teacher did share the learning target and look-fors throughout the lesson. She provided the learning target and the look-fors at the beginning of the lesson. She planned a lesson in which students would use the look-fors throughout the lesson, constantly asking themselves "Can I find this element in this fairy tale and support my conclusion?" The language of the look-fors was organized and presented in the form of a checklist, so students had the language in front of them to help them use it. The teacher used the look-fors in her oral feedback to the groups.

These look-fors can be used for more than one performance of understanding—more than just today's group work. In fact, they can be used any time students are exploring fairy tales. That means that by applying the look-fors, students are also deepening their understanding of the lesson's content. In fact, these look-fors will be used many times in this group of lessons as students progress to analyzing a fairy tale by themselves and writing their own fairy tales.

Yes, the students used a checklist, and the lesson and unit design promotes the idea that high-quality work takes effort over time. Students are

developing their understanding of the fairy tale genre by using the same look-fors over several lessons.

Self-assessment is specifically required in the lesson in Scenario 9.3, since students must supply support for their reasoning and answer the questions "What do you think? Why do you say that?" In the next lesson, students will work individually to analyze a fairy tale and realistic next-step goals will be given to each student in the teacher's feedback. Meanwhile, in this lesson, placing the students in learning groups helps to scaffold self-assessment for students who may not be adept at using the look-fors. By working with their peers, students have the opportunity to discuss the tales and discover nuances that they might have missed if working independently on the first effort.

In short, the students know exactly what they are learning in this lesson and have specific information in the form of look-fors that they can use to guide their work as they are learning and working together. The same look-fors will guide student self-assessment and self-regulation during the lessons that will follow where each student will be asked to analyze fairy tales independently and progress to writing an original fairy tale. This example was adapted from a lesson created by Rachael Moss, a 9th grade English teacher in the Neshannock School District in New Castle, Pennsylvania.

Check Your Understanding

Walk through the lessons described in the next scenarios and critique the student look-fors using the characteristics of quality self-assessment organized in Figure 9.1. We have selected two examples, one elementary and one secondary. As before, we encourage you to read both of them, no matter what grade level you teach, to strengthen your own understanding of what to look for in classrooms.

Scenario 9.4

Context: After carefully explaining the difference between a noun and a pronoun and having students apply their look-fors to a series of sentences that contain either nouns or pronouns, a 2nd grade language arts teacher prepares the class for the performance of understanding.

The learning target: I can find nouns and pronouns in sentences.

The performance of understanding: Students read a series of sentences, circle the noun or pronoun, tell which it is, and tell why.

The look-fors:

- Call a word a noun if it names a person, place, or thing.
- Call a word a pronoun if it holds a place for a person, place, or thing but does not name it.

Student self-assessment: The teacher asks her students to tell her how they plan to use their look-fors to make sure that they are reading like detectives to find out whether the sentence uses a noun or a pronoun. Once students share their plans out loud, the teacher reminds them that they can reach their planned goals by using their look-fors to check their work along the way.

Feedback: As the teacher circulates around the room to observe students, she stops to check on their use of the look-fors. She gives them feedback on both the quality of their work and on how well they are using the look-fors and checking their work.

Take a moment to use the Collaborative Inquiry Guide for Student Self-Assessment (Figure 9.1) before you read on to find our analysis of this feedback.

Our analysis and suggestions for Scenario 9.4

We can answer "yes" to all the questions on the Collaborative Inquiry Guide for Student Self-Assessment. The teacher is using the language of the look-fors to help students set lesson-specific goals for their work. She is sending them the message that what they plan to do during the performance of understanding is important. She helps them see themselves as active learners who can set and get learning goals in today's lesson. The look-fors can be used for more than one lesson—they apply any time nouns and pronouns are studied. Therefore, as students become capable self-assessors using these look-fors, they show themselves and their teacher that they are capable learners of the concepts of noun and pronoun. Most important, *they are aware* of what they are learning and how they learned it. Self-efficacy, self-regulation, and metacognition are all enhanced.

Scenario 9.5

Context: Mrs. Johnson's 9th grade geography students are writing travel brochures to persuade people to visit a country assigned to them.

The learning target: I can describe a country and present its advantages persuasively.

The performance of understanding: Students will self-assess a travel brochure that they drafted in yesterday's lesson.

The look-fors: Each student uses a set of look-fors organized as a rubric. It is the same rubric they used to plan and draft their brochure content.

	Advanced	Proficient	Not Proficient
Content	• I selected facts about the country that are appropriate and interesting for a travel brochure. • My information is accurate and sources are cited.	• I selected facts about the country that are appropriate for a travel brochure. • My information is mostly accurate and most sources are cited.	• The information I present about the country is not appropriate for a travel brochure, or is not accurate. • I don't cite the source of my information.
Persuasive Communication	• I use words and pictures in a very persuasive way to showcase the advantages of visiting the country. • People reading this brochure could easily and quickly see why they should want to visit the country.	• I use words and pictures in a persuasive way to describe the advantages of visiting the country. • People reading this brochure could see why they might want to come to visit the country.	• I use words and/or pictures, but not in a very persuasive manner. • People reading this brochure would not be able to see why they should visit the country.

Note that the teacher has chosen not to use a "grammar and spelling" criterion or a "visuals" criterion. Students have been studying the art of persuasion and are considering these aspects of the brochure as part of persuasive communication. In this social studies class, for this assignment, the emphasis is on becoming familiar with the geography content and being able to communicate it.

Student self-assessment: Today students are working to assess the quality of their content by comparing it to the look-fors in their

rubric. Mrs. Johnson circulates around the room giving students feedback mainly on the quality of their self-assessment.

Feedback: Mrs. Johnson will use the same rubric to assess students' drafts. During personal conferences, she will explain where their assessments match and where they are different. Then the students will use the information to improve the content for their brochure.

Again, take a moment to use the Collaborative Inquiry Guide for Student Self-Assessment before you read our thoughts on this example.

Our analysis and suggestions for Scenario 9.5

Again, this lesson rates a "yes" on each of the questions in the Collaborative Inquiry Guide. The students are practicing self-assessment using a rubric that they know describes what to look for in their work, for improvement and later for grading. The students are learning to weigh the accuracy and fairness of their own self-assessments. This will help those students who are using rose-colored glasses to be more realistic in their judgments regarding the quality of their work. It will also help students who are pessimistic about their work to see what they are doing well so that they can confidently build on it when they rewrite content. This process will help them to be better able to assess the quality of their writing so they can regulate it and improve it in similar writing tasks.

What if?

In our experience, self-assessment can be derailed by several factors. Probably the most common one is that teachers simply do not use high-quality look-fors throughout the lesson. (When students know what to look for, most will go ahead and look!) These teachers may have a learning target—or think they have one, because they stated it once—but they don't really use it during the lesson. However, they have not stopped to articulate look-fors, which means students have no language to describe or frame what it is that they are looking for in their work. We have let the cat out of the bag for Scenario 9.6. What if you walked through this lesson?

Scenario 9.6 As students are working independently during today's lesson, Mr. Morgan walks around the room. The students are solving 20 problems that require them to multiply decimals. Several students call him over to their desks, saying, "I don't understand what I am supposed to do." Mr. Morgan asks them what they don't understand, and they say things like "It's hard" and "I don't know how to do this." Mr. Morgan stops the class and asks the students who are not having trouble to explain their steps to the class as they demonstrate the problems on the board. Several of the students who demonstrate their work at the board do not use the proper math terms and are unable to describe exactly what they did or the steps in the process that they used.

Feeding learning forward

Begin a feed-forward conversation with this teacher by asking him what he wanted the students to learn. Expect that he might say, "To do these kind of problems," and that the first part of the conversation will be helping him conceptualize what numbers and operations principles students are supposed to be learning about when they learn the algorithm he is teaching for multiplying decimals. Reference to standards and curricular goals might help. Do not be afraid to have a "content" conversation first, because articulating clear look-fors requires solid grounding in an understanding of the content. Mr. Morgan may have that understanding, but he didn't pull it up when he designed the lesson. Even the students who "can do it" are learning how to apply an algorithm and not really learning much about place value, base 10, properties of multiplication, and so on.

The micro view. Using the Collaborative Inquiry Guide identifies the symptoms of the problem we just mentioned. Mr. Morgan didn't have a learning target and look-fors, which is why his students had a hard time articulating what was "hard" and what they "couldn't do." It is also why they were not able to self-assess except with the gross generalization "I can't do it." Peers who were called in to help did not advance their classmates' learning much either, because all they could do was show how to "do the problem," not how to understand it.

The snapshot view. The picture of learning that emerges here is blurry. Even the students who can "do" the work are not able to explain it. Without look-fors, students are not able to say what exactly they are doing or learning. The teacher learns simply that many of his students are having trouble, but not why. Without look-fors, students are not able to say what the trouble is.

The long view. The long view for this teacher can proceed along several avenues. You would decide on those next steps collaboratively, in conversation with the teacher. Here are our suggestions for places to begin.

For the teacher's learning and growth. Mr. Morgan needs both content and pedagogical improvement. To increase his content knowledge, he might start by working with other math teachers to unpack the relevant state mathematics standards or math curriculum goals.

To help Mr. Morgan increase his pedagogical skill, we can use the checklist in Figure 2.3 (p. 33) for discovering this teacher's next level of work. The presenting problem was that students were not able to self-assess. They could not tell Mr. Morgan what kind of help they needed. But using Figure 2.3, we can see that self-assessment is not the root of this problem. Look at the checklist. Yes, Mr. Morgan was trying to teach a worthwhile lesson (multiplying decimals is an important skill and is included in the standards). But that's where it stops for him. The students do not use a clear learning target, so they do not see the connection between what they are doing and what they are supposed to be learning. Students do not have look-fors, and they are not receiving quality feed-forward information about where they are. So go back to the first unchecked item on the list—learning target—and start there with Mr. Morgan.

For your learning and growth. Your own learning and growth might take several different directions, depending on your school context. If the "just do the problem" approach is common among mathematics teachers you work with, you might try to work on learning targets with a group of mathematics teachers. If other math teachers do not share Mr. Morgan's problem, you might take the opportunity to develop your own skills to support teacher learning by being the best you can be for this teacher who has much to learn. Work to make sure you help him develop a clear professional learning target, with clear professional look-fors for his teaching practice. Work to make sure that your own feedback is of high quality and feeds his learning forward. Look to Mr. Morgan's progress as a teacher for evidence of your success with these coaching skills.

Summing Up

In this chapter we discussed student self-assessment and its relationship to student self-regulation of learning and to motivation. We stressed that the most important thing you can do for students' future is to help them become assessment-capable students who can monitor their own learning and make changes as necessary in their reading, studying, problem solving, and performing. Finally, we showed that the quality of the opportunities you provide your students for self-assessment is dependent on the quality of your learning targets and look-fors.

In the next chapter, we turn to one final learning process highlighted in the formative walkthrough: questioning. The quality of classroom questions directly affects the quality of classroom discourse and the quality of students' thinking. The questions that teachers ask—and that students ask—help make student thinking visible and available to use as evidence of student understanding.