

Looking for Formative Feedback

Do students have a clear idea of where their work is now and what to do next?

Before we look at its characteristics, it will help to know what we mean by “effective formative feedback.” Effective formative feedback is feedback that feeds student learning forward, and that means feedback that a student finds meaningful and useful—and actually uses to improve and to further learning. As we go over characteristics of effective feedback that teachers can provide to students, remember that feedback with these characteristics maximizes the *likelihood* that students will be able to use it for improvement. It does not *guarantee* student improvement. The test of feedback’s effectiveness is whether the student does, in fact, learn and improve.

What Is Formative Feedback?

We can look at the characteristics of effective feedback through three different lenses. Chapter 3, which was about giving effective feedback to teachers, mentioned these three ways of looking at feedback and gave examples of how they appear in collegial feedback. When you coach teachers, you should look at their feedback to students in these three ways, as well.

In the micro view, you analyze all the “parts” of feedback: Is it descriptive, is it timely, and so on. Analyzing individual characteristics of feedback will tell you about the raw material you have to work with and help you gauge the feedback’s potential to be effective. In the snapshot view, you ask what



evidence of learning is contained in the feedback episode: What did the student learn from it? What did the teacher learn from it? Effective feedback needs to provide a useful snapshot of learning. Finally, the long view looks into future learning: What next steps should the teacher and student take to use the feedback? Were these steps indeed taken? And did learning, in fact, occur? Let's take a closer look at all three views of feedback.



The micro view

Looking at feedback “through a microscope,” we can pick out and analyze characteristics of effective feedback. Feedback that is *descriptive* expresses what is seen in the student work, rather than pronouncing judgment. For example, “You have a lot of interesting details about Washington’s military career. Can you write a little more about his political career?” describes a characteristic of a report and adds a suggestion for a next step based on that description. In contrast, “Good job!” evaluates the work but doesn’t provide any reason for the evaluation. What was good about the report?

Feedback that is *timely* is delivered while the student is still learning. For learning facts or simple skills, immediate feedback is best. Think of the answers that are printed on the back of flash cards. Students check the back of the card and immediately know whether they have memorized the fact correctly. For learning complex skills or for learning that requires higher-order thinking, feedback should come after the student has had a chance to practice or think. Deliver this feedback while the student still has time (in a unit, for example) to improve, but not so immediately as to be preemptive of the learning process.

How much information should feedback contain? The right amount of information is critical, because too little is not helpful and too much can overwhelm. Feedback should describe at least one strength of the student’s work and make one suggestion for improvement. Feedback may contain more information than that, depending on the content, the student’s needs, and the particular next step. Feedback should *not* contain everything you notice about work. You want to use the Goldilocks principle: not too little, not too much, but ju-u-u-ust right. That amount will differ for different content and different students. This surprises some people, who think that the teacher’s job is to notice “everything that’s wrong” with a piece of student work. But remember,

the goal of feedback is to get students to take the next step. Students who are overwhelmed with too many things may not take any step at all.

Feedback should describe either *aspects of the work* itself (the finished product) or the *process the student used* to do the work. For example, feedback on a report could focus on the report itself or the student's work doing the research and writing that went into the report, or both. How do you decide? Use the learning targets and the look-fors. What were you trying to teach? What were you and the students going to look for? If the target was about producing a finished report, give feedback on the work. ("This report is interesting. You laid out the problem very clearly. I kept wondering whether the wolves will survive in the future.") If the target was about learning how to go about writing a report, give feedback on the process. ("I noticed you looked for different types of sources, not just books or sources on the Internet. What did you learn about using different types of sources by doing this?") If the work involved both kinds of learning targets, give feedback accordingly. What you *don't* want to do is give feedback on the student personally. For example, "Great report, Teresa; you're really smart" is *not* effective feedback. It doesn't help Teresa figure out what was good about her report so she can continue to hone those skills, and it implies that her success was because of a personal characteristic and not her effort.

Feedback should be positive, clear, and specific. Being *positive* doesn't mean being artificially cheerful or saying something is good work when it's not. Being positive means casting comments as strengths and opportunities for learning: "Here's something I really appreciated in your work. See how you have met your learning target?" "Here's something you can do to get closer to your target."

Clear feedback means feedback that is clear to the student. Check to make sure. For example, use a question: "So, what are you going to do next?" or "What do you think is the most important piece of feedback on this paper?"

Feedback should be *specific* enough that students know what to do next, but not so specific that the work is done for them. For example, copyediting a student's writing might lead to a next draft that looks great because the student copied your edits, but without the student having really improved—without having really understood why, for example, a comma goes here and not there. For students who are up to it, say something such as this: "There



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are three comma faults in this paragraph. Find them and fix them.” For students who are not ready, scaffold the feedback: “Can you find one place where you need to add a comma?”

The tone of feedback should imply that the student is an active learner, not just someone who responds to assignments. Teachers should avoid feedback that sounds bossy, or like they are in charge and giving directions that must be followed: “Because I said so.” Take a respectful tone in your feedback that casts the student as a learner: “What were you thinking as a writer when you chose this word?” “Now that you’re learning long division, here’s something you’ll want to keep in mind.”



The snapshot view

In addition to the individual aspects of feedback that we analyze in the micro view, the feedback as a whole should give a picture of learning. Both the student and the teacher should learn something from a feedback episode.

At a minimum, a student should learn one thing she did well and one thing that could be improved, with some idea of how she might accomplish that improvement. In many feedback episodes, the student gets more insights than that. The question to ask is: *What did the student learn from this feedback episode?* By “feedback episode,” we mean the feedback itself, the way it was delivered, and (heading toward the long view of feedback) what the student and the teacher plan to do about it.

At a minimum, the teacher should get a picture of the student’s strengths and weaknesses in regard to whatever learning goal the work was aiming toward. In many feedback episodes, the teacher also learns something about her instructional methods, because student strengths and weaknesses sometimes highlight aspects of instruction that worked well and those that didn’t. The question to ask is: *What did the teacher learn from this feedback episode?*

Therefore, as a coach, make sure you can say what the teacher and the student have learned from feedback you observe. At a minimum, the student should learn the strengths and weaknesses of his previous work, couched in terms of the learning target and the look-fors, and get enough information to set a goal for his next performance. And at a minimum, the teacher should learn what next steps in instruction she should take. What learning target, performance of understanding, and look-fors should this student tackle next?



The long view

For the long view, you want to make sure that feedback has the opportunity to feed learning forward. Feedback should work to help students on the formative journey: *Where am I going? How am I doing? How can I close the gap?* Improvement is only potential until it is realized through effective feedback and an opportunity to actually work on closing the gap—to work on approaching nearer and nearer to the learning target.

To look at feedback taking the long view, ask these questions: *What next steps should the teacher and student take to use the feedback for learning? Were these steps indeed taken? And did learning, in fact, occur?* If this long view is not taken—and acted upon, and checked—then all the previous steps will be for naught. However, if this long view is taken, learning will almost certainly move forward. Or if it doesn't, you and the teacher will have enough evidence to modify and adjust the next steps until learning does move forward.

What does it look like when feedback is used to feed learning forward?

To affect learning, feedback needs to be used—and in the same learning cycle. Primarily, that means the *student* needs to use the feedback to revise work or extend thinking. But the teacher has the responsibility to make sure there is an opportunity for that to happen. Teachers should plan lesson time that includes using feedback and should organize instruction and materials to make sure that happens. Feedback given with the general intention that the student will use it for some indeterminate “next time” is a waste of time and energy. This is not the way learning works.

Recall from Chapter 2 that the formative learning cycle begins with modeling and explaining—or otherwise introducing students to their learning target and look-fors. Then students have an opportunity for guided practice, using the learning target and look-fors. After some experiences that help them get familiar with the content and skills necessary for the learning target, students participate in a performance of understanding. This activity simultaneously helps a student get a clearer picture of the learning target, helps the student learn, and gives evidence of the student's learning. Teachers, the student, or peers give formative feedback on the work. Then, students should have the opportunity to improve the work—what we have called “the

gift of the golden second chance." Improving the work consolidates learning. Plus, improving the work allows students to use metacognitive strategies, because they will see not just some work they did but a portion of a learning trajectory. Students learn more content, and they learn to see themselves as agents of their own learning. ("I did this problem and got some feedback. I tried the teacher's suggestion and I did the next problems better. Now I know more about dividing fractions, and I see how deciding to change my strategy worked.")

For inquiry lessons, the formative learning cycle might include "exploration" instead of "model and explain," but it still will include a learning target, a performance of understanding, and student look-fors. It's just that the students will come to them through exploration instead of being given them at first. However, in an inquiry lesson the teacher has the learning target in mind when she designs the exploration, which should lead students right to the target.

No matter whether a lesson has a more didactic structure or an inquiry structure, feedback should have a place in the students' approach to the learning target, and they should have the "gift of the golden second chance" to use the feedback to improve their learning. For example, we once observed a 6th grade science lesson in which students were trying to figure out how to design an experiment to test whether frogs could hear. Students were in a science lab in groups, and each group was looking at a frog in a terrarium. The learning target was about experimental design, but the students had just been given the following task: "How could you figure out whether your frog can hear?" They had not been given any target such as "I can identify and control extraneous factors when I design an experiment." As the groups talked about what they might do, the teacher circulated and gave oral feedback. Most of his feedback centered on the issue of how the students could introduce a noise into the frog's environment without also introducing something the frog could see. Students' final experimental designs were based on these feedback conversations. Then, as groups did their brief experiments and shared results, the teacher and students together established the learning target, which was about controlling extraneous factors in experimental design. This lesson still had a performance of understanding (design an experiment), feedback (oral), and an opportunity for improved performance (the final experiment).

How Will I Recognize Quality Formative Feedback?

When you walk through classrooms looking for feedback, make sure to use all three lenses. Look through your imaginary microscope, camera, and telescope to observe not only what the feedback says, but how it enhances learning. Figure 8.1 (p. 146) presents a Collaborative Inquiry Guide for Formative Feedback. Let's apply this guide to the student example on the next page.

Scenario 8.1

Context: Second grade students have been working on sentenc-ing skills, word choice, and narrative writing all year. As a culminat-ing task, students are preparing to put it all together so that they are prepared for the state writing test. They have been learning to pay attention to the content, style, and mechanics of their writing all at the same time in the same piece of work. The climate of the class is conducive to feedback. Students understand feedback as "helping them get better." You walk through today's lesson.

The learning target: I can use all my writing skills in a paragraph.

The performance of understanding: Students revise a paragraph telling what they like about summertime.

The look-fors:

- My sentences begin with capital letters and end with periods.
- My sentences are varied and interesting to read.
- I begin and end my paragraph with a sentence that tells my main idea.
- I use details to support my main idea.

In yesterday's lesson, the students did rough drafts. Today the teacher returns the rough drafts with feedback like the following.

Applying the guide on p. 146, you would first assess the individual elements of the feedback. The teacher both described and evaluated the mechanics ("Nice sentences—capitals, periods, good word choice"). "Nice" and "good" are evaluative words, but the teacher also described what is good. The comment about the content is descriptive, pointing out that all the sentences are about swimming.

The feedback was timely. Papers were returned the next day in time for a lesson in which students would revise their paragraphs. The feedback

contains about the right amount of information, commenting on a few strengths and making one suggestion for improving the paragraph. Feedback focused on the work itself (the paragraph) and compared student work to the look-fors. Although the teacher did not use the exact words as the look-fors, her feedback addressed mechanics, word choice, and quality of content details. The feedback was positive in tone and clear. The suggestion for improvement was specific (add a detail about why the student thinks swimming is fun), but the work was not done for the student, who still had to write his own reason.

Summer is my favorite
 season. I like to swim
 in the pool with my new
 swimsuit. When we go on
 vacation I like to swim
 in the ocean. When we
 come back from vacation
 I like to go
 swimming at Whitehall
 Country Club. It is fun.
 These are the reasons
 why I like summer
 the best.

Nice sentences—
 capitals, periods, good
 word choice.
 What I like best is
 that all the sentences
 are about swimming,
 so they all go together.
 Can you add a
 sentence or two telling
 why you think
 swimming is fun?

Second, assess what the student and teacher learned from this feedback. The student learned he had a good paragraph because his mechanics and word choice were good and his content was unified. He learned one way he could extend his argument about swimming.

The teacher learned that this student is able to keep both content and mechanics in mind as he writes paragraphs and that he is ready for more nuanced thinking about his content.

Finally, assess the feedback using the long view. The teacher had built into her instructional design an opportunity for students to use her feedback. The students were using feedback in today's lesson to revise paragraphs they wrote yesterday.

Obviously, we chose this example because it is a good example. But the proof of the pudding is still in the eating, to para-

phrase the last question in the Collaborative Inquiry Guide. Only if the feedback resulted in an observable improvement in student work can we say for

Figure 8.1 Collaborative Inquiry Guide for Formative Feedback			
Feedback that successfully feeds learning forward is written well (the micro view displays the characteristics of effective feedback), serves as an episode of learning for both the teacher and the student (the snapshot view gives a picture of learning), and supports next steps for improvement (the long view offers feedback points to future learning and helps students go there). Use this Collaborative Inquiry Guide to study examples of feedback from the three perspectives.			
The micro view: Assess the individual elements of the feedback	Yes	Somewhat	No
Is the feedback descriptive? <i>Explain your choice:</i>			
Is the feedback timely? <i>Explain your choice:</i>			
Does the feedback contain the right amount of information? <i>Explain your choice:</i>			
Does the feedback compare student work to criteria? <i>Explain your choice:</i>			
Does the feedback focus on the work? <i>Explain your choice:</i>			
Does the feedback focus on the process the student used to do the work? <i>Explain your choice:</i>			
Is the feedback positive? <i>Explain your choice:</i>			
Is the feedback clear (to the student)? <i>Explain your choice:</i>			
Is the feedback specific enough to support learning but not so specific the work is done for the student? <i>Explain your choice:</i>			

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Figure 8.1 | Collaborative Inquiry Guide for Formative Feedback (*continued*)

The snapshot view: Assess the feedback as an episode of learning	Yes	Somewhat	No
Did the student learn something from the feedback? <i>What did the student learn?</i>			
Did the teacher learn something from the feedback? <i>What did the teacher learn?</i>			
The long view: Assess the feedback for its support of future learning	Yes	Somewhat	No
Did the student get an immediate opportunity to use the feedback? <i>Explain your choice:</i>			
Did the feedback result in an observable improvement in student work? <i>Explain your choice:</i>			

sure that the feedback supported learning in the long run. We expect that this happened, but we can't tell you for sure, because we don't have the final drafts. When you coach teachers, you will have the advantage of being able to follow up and find out what effects a teacher's feedback had on student learning.

Check Your Understanding

Imagine you are walking through the lessons described in the next scenarios, and critique the student look-fors using the characteristics of quality organized in the Collaborative Inquiry Guide (Figure 8.1). We have chosen two examples that differ in grade level and subject matter. No matter what your teaching context is, we hope you will read both of them to strengthen your understanding of the characteristics of effective formative feedback and your skill in coaching effective formative feedback. Seeing a variety of illustrations should help you get a more complete view of the concepts in the Collaborative Inquiry Guide and help you transfer and apply those concepts in your coaching.

Scenario 8.3

Context: A 5th grade class is learning to use multiplication to check division. The teacher is aware that this can be taught as a rote strategy and is working to show students that the reason this kind of “checking” works is that multiplication and division are related operations. This is why her learning target isn’t simply and only “I can use multiplication to check division.”

The learning target: I can show how multiplication and division are related operations.

The performance of understanding: Students do division problems and then “check” them with multiplication.

The look-fors:

- I can use multiplication to check division.
- I can pick the right numbers from the division problem to multiply together.
- I can compare the multiplication results with the proper number in the division problem.
- I can figure out what is wrong if my multiplication and division problems don’t match.

The feedback: Here is an example of one student’s work (p. 152) and the teacher’s feedback.

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

Our analysis and suggestions for Scenario 8.3

This feedback also rates a “yes” for all the elements of feedback to be examined in the micro view. We believe “Keep trying!” is an exhortation here. Depending on the student, the teacher might not need or want that

Name _____

Date: _____

Division Worksheet

Directions: Divide. Using the technique to check your answer, show your work by multiplying.

Example:
$$\begin{array}{r} 21 \\ 5 \overline{) 105} \\ \underline{-10} \\ 05 \\ \underline{-5} \\ 0 \end{array}$$

Check It!
$$\begin{array}{r} 21 \\ \times 5 \\ \hline 105 \end{array}$$

1.
$$\begin{array}{r} 329 \\ 2 \overline{) 658} \\ \underline{6} \\ 05 \\ \underline{-4} \\ 180 \\ \underline{-180} \\ 0 \end{array}$$

$$\begin{array}{r} 329 \\ \times 2 \\ \hline 658 \end{array}$$

2.
$$\begin{array}{r} 2035 R1 \\ 6 \overline{) 1221} \\ \underline{12} \\ 01 \\ \underline{-0} \\ 01 \end{array}$$

$$\begin{array}{r} 2035 \\ \times 6 \\ \hline 12210 \end{array}$$

3.
$$\begin{array}{r} 89 R2 \\ 9 \overline{) 801} \\ \underline{72} \\ 81 \\ \underline{-81} \\ 00 \end{array}$$

$$\begin{array}{r} 811 \\ 8912 \\ \times 9 \\ \hline 80,208 \end{array}$$

4.
$$\begin{array}{r} 311 \\ 3 \overline{) 933} \\ \underline{9} \\ 03 \\ \underline{-03} \\ 00 \end{array}$$

$$\begin{array}{r} 311 \\ \times 3 \\ \hline 933 \end{array}$$

5.
$$\begin{array}{r} 1731 \\ 4 \overline{) 6924} \\ \underline{4} \\ 29 \\ \underline{-28} \\ 12 \\ \underline{-12} \\ 04 \end{array}$$

$$\begin{array}{r} 1731 \\ \times 4 \\ \hline 6924 \end{array}$$

Keep trying!
You showed that it is very important to check your answers. When you check, if you don't come up with the same answer, you need to go back and re-do because something is wrong somewhere.

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exhortation and begin the feedback directly with “You showed...,” which describes what the student did. An important point is that the description in the feedback and the suggestion for a next step are directly related to the student look-fors.

Without such a foundation, the snapshot view and the long view of feedback wouldn't be of much use. With this nice descriptive feedback and simple suggestion for improvement, it becomes clear what the teacher and student learned and what should happen next. Teacher and student both learned that this student has the right idea, but when the multiplication doesn't match the division, she stops. Notice that the teacher, in her feedback, does *not* redo the student's work for her but points her to the work that needs to be redone. A simple “next step” opportunity for this student would be to redo problem 2, see if she could identify where she made her error, and explain how she corrected it. For this student, that might be enough. If she needed more practice, she could redo problem 3 in the same way, or do a new problem of the same type. The point here is that the learning episode is not over when the student receives this nicely worded, effective-sounding feedback. To realize the effectiveness, the student has to have an opportunity to follow up.

What if?

In our experience, the two places where teachers are likely to miss opportunities for their feedback to have an effect on learning are in the content of the feedback itself and in planning for next steps in learning. Specifically, feedback falls short of supporting learning when the teacher is too evaluative in the feedback or “corrects” work instead of giving feedback. The elements of feedback that the guide suggests you look for in the micro view will help address this kind of error. Additionally, feedback falls short of supporting learning when teachers “give” feedback but then assume that the students will remember it and “do something” in some undefined “next time” assignment. No matter how dedicated a learner a student is, this is simply not how learning works. Feedback that is not used while the learning is still in progress will not have the desired effect of feeding learning forward.

Summing Up

We have talked about characteristics of effective feedback at three different levels: the micro view, the snapshot view, and the long view into future learning. If teachers attend to all of these, they are very likely to give feedback that feeds students forward. To coach teachers to do this, your own feedback to teachers should model the characteristics of effective feedback, be an episode of learning for each of you, and support professional learning into the future.

Finally, feedback that does not get used is wasted. The student needs to use the feedback; the teacher's job is to structure lesson opportunities to make that happen. This is the final factor in ensuring that feedback feeds student learning forward—"the long view." In the Collaborative Inquiry Guide, it is the final question. In some ways it is the most important question about feedback.