"How Am I Doing?"

Effective feedback helps students see what they know and what they need to keep working on.

Jan Chappuis

One day when our daughter Claire was in 3rd grade, she brought home a math paper with a -3, a smiley face, and an *M* at the top. After we looked at it together, I asked, "What do you think this means you know?" She looked puzzled and said "Math." When I asked, "What do you think this means you need to learn?" she looked more puzzled and said, "Math?" Claire had no idea what the marks on her paper said about herself as a learner of mathematics. Her paper did not tell her what she was good at or what she needed to keep working on—the marks did not function as effective feedback.

We know that feedback plays a crucial role in bringing about learning gains. However, Lorrie Shepard (2001), in summarizing Kluger and De Nisi's meta-analysis on feedback research, points out that only in about one-third of the 131 studies examined did feedback improve learning.

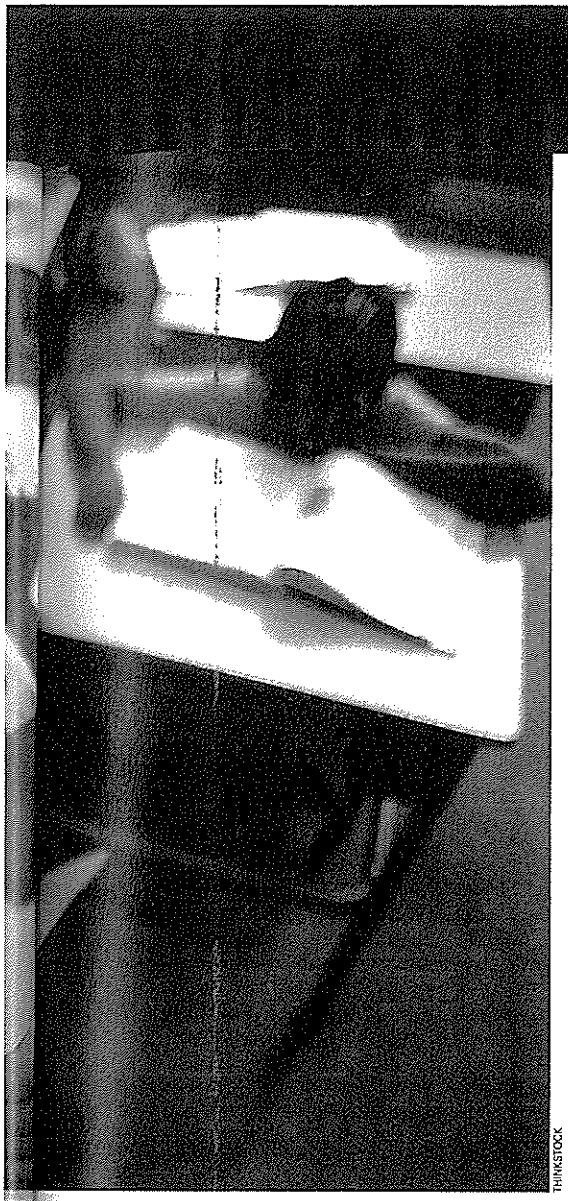
It turns out that it isn't the *giving* of feedback that causes learning gains, it is the *acting* on feedback that determines how much students learn. Shepard and other researchers (Ames, 1992; Black & Wiliam, 1998; Butler, 1988; Hattie & Timperley, 2007) have concluded the following:

- *What* feedback describes is the key to its impact.
- Feedback that directs attention to the *intended learning* has a positive impact on achievement.
- Feedback is most effective when it points out strengths in the work and gives guidance for improvement.

Prerequisites for Effective Feedback

Unless students know the answer to the question, "Where am I going?", feedback is just a series of instructions disconnected from a learning destination. For example, as an elementary teacher I might have begun a lesson like this:

> OK kids, time for math. Remember, we're studying decimals. Take out your books and turn to page 152. Read the



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instructions at the top of page 152, and when you know what you're doing, send your table leader up to get your materials. We're going to go on a decimal hunt.

What have I told my students? The subject (mathematics); the topic (decimals); the resource (page 152 in the book); and the activity (decimal hunt). What have I not told them? The intended learning: "We are learning to read decimals and put decimal numbers in order." My students are on their own to figure out what they are learning. Chances are they think their job is to "go on a decimal hunt."

Absent a learning target, students will believe that the goal is to complete the activity. When students believe that *finishing* rather than *learning* is the goal of their effort, acting on feedback about place value may be regarded as more work, not an opportunity for learning.

Three conditions related to the learning need to be in place before we offer feedback. First, students need a clear vision of the intended learning. Second, our instructional activities need to align directly with the intended learning, and students need to see the connection between the learning and what they are doing. Third, assignments and assessments need to be set up so that students can interpret the results as indicators of what they have or have not yet learned.

Five Characteristics of Effective Feedback

Drawing from research, we can think of effective feedback as having five characteristics (Chappuis, 2009):

1. Effective feedback directs attention to the intended learning, pointing out strengths and offering specific information to guide improvement. Effective feedback lets students know the strengths in their work and helps target problems to address. We can think of pointing out strengths as *success feedback*. For example, "The strongest part of your solution is . . . ." Success feedback can identify what the learner did correctly, describe a high-quality feature of the work, or point out the effective use of a strategy or process.

We can think of "guidance" as *intervention feedback*. For example, "The drawing you made didn't seem to help solve the problem. Try using the tree diagram we learned about yesterday." Intervention feedback generally identifies a correction, describes a feature needing work, points out a problem with a strategy or process, offers a reminder, makes a specific suggestion, or asks a question.

With younger students, we can use a form such as the "Stars and Stairs" shown in Figure 1 (p. 38), where the star is the success feedback and the stair is the intervention feedback. This helps establish a forward-looking stance to corrective feedback: "What's my next step? What do I need to do to accomplish this learning?"

With older students, we can use a similar frame with a section labeled "That's Good" for success feedback and "Now This" for intervention feedback. If we want to monitor the actions students take, we can add a section to the form in which students note what they did with the feedback and identify one or more aspects that they think have really improved. (See www.ascd.org/el0912chappuis for an example form.) Their comments, which they turn in with the revised work, help us know whether they understand our feedback.

> Asking students to think about their work before receiving feedback scratches up the "soil" in the brain so the feedback seeds have a place to settle in and grow.

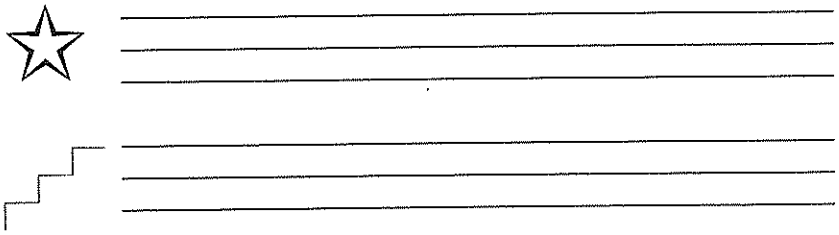
If the assessment information comes in the form of success criteria or a rubric, students can complete a form such as the one shown in Figure 2 (p. 39) *before* receiving feedback. We can then agree, offer additional information, or offer different information.

Asking students to think about their work before receiving feedback scratches up the "soil" in the brain so the feedback seeds have a place to settle in and grow. In addition, this protocol offers guided practice for students in becoming competent self-assessors.

FIGURE 1. Stars and Stairs Form

Teachers can use the Stars and Stairs form to provide feedback to younger students. The star indicates what the student is doing well, and the stair indicates steps the student needs to take to improve.

Name _____ Date_____



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2. Effective feedback occurs during the learning, while there is still time to act on it.

Sometimes we give feedback with a final mark or grade. For such feedback to influence subsequent learning, students must remember it, translate it into advice that is generalizable across tasks, and apply it the next time they encounter a task in which this learning could apply. Generally, strong students are able to do this, but struggling students aren't.

Think about a girls' volleyball coach. When the girls are practicing their serves, how long does the coach let them practice serving incorrectly? Vince Lombardi is frequently credited with saying, "Practice doesn't make perfect; practice makes *permanent*. Only *perfect* practice makes perfect." To ensure students are practicing perfectly, successful coaches intervene as soon as possible to correct errors in form or motion. They don't wait until after the game. In our classrooms, how long do we allow students to repeat a mistake or cement a misconception? "Where's the practice?" is the question that guides us to the most effective feedback point in the learning cycle.

3. Effective feedback addresses partial understanding.

When student work does not demonstrate at least partial understanding of a concept or process, feedback is not usually effective. In their 2007 meta-analysis of research on feedback, Hattie and Timperley conclude that when student work demonstrates little or no understanding the problems are best addressed through further instruction. Feedback can only build on learning; if the learning isn't there, the feedback isn't going to move it forward.

When teachers provide students with more guidance than they need, feedback doesn't deepen the learning.

Corrective feedback in the absence of partial understanding can have a negative emotional effect (Hattie & Timperley, 2007). If students don't understand the task but try it anyway, and then receive feedback they don't understand, they can come to believe they are incapable of succeeding. One simple clue that a student's work is not ready for feedback is that you can't find any legitimate success feedback to offer. When the work doesn't demonstrate any understanding, don't give feedback—reteach instead.

4. Effective feedback does not do the thinking for the student.

If you have ever said to your child, "Clean up your room" more than once and then given in and cleaned it up yourself, the reason for this recommendation will be apparent. When I do the work for my child, I get a cleaner room, but my child is no closer to becoming a competent room cleaner. I haven't taught her to clean her room; I have taught her to wait me out.

When teachers provide students with more guidance than they need, feedback doesn't deepen the learning because students don't need to think. For example, teachers at the secondary level often notice that students' written work includes errors in conventions taught at earlier grades. Figure 3 (p. 40) shows three ways a teacher might give feedback on a sentence from a 10th grade social studies paper with typical

errors. The first is an example of *over-feedbacking*, the equivalent of saying "clean up your room" and then doing the work yourself. The second example provides guidance by indicating which types of errors appear in each line (C = capitalization, U = usage, P = punctuation, S = spelling), but it doesn't do all of the student's thinking. The final example indicates areas still needing work, with a dot in the margin for each error in that line. The student is doing more of the thinking, thereby increasing the chances that he or she will learn from the experience.

Feedback can only build on learning; if the learning isn't there, the feedback isn't going to move it forward.

FIGURE 2. Assessment Dialogue Form

Students can complete the first part of this form before receiving feedback. The teacher then provides the feedback on the form, and the student responds with the plan for what to do next.

Name:_____ Date: _____

Assignment: _____ Feedback Focus:_____

MY OPINION

My strengths are _____

_____

What I think I need to work on is _____

_____

FEEDBACK

Strengths _____

_____

Work on _____

_____

MY PLAN

What I will do now _____

_____

_____

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5. Effective feedback limits corrective information to an amount the student can act on.

How much corrective feedback can each student reasonably be expected to act on in a given time? Information beyond that is less likely to be used. In a review of research on written composition, George Hillocks (1986) noted that in studies on error correcting, teachers who marked every error were no more effective in increasing the quality of students' work than teachers who only marked the errors that current instruction focused on.

Students differ in their capacity for responding to correction, and too much corrective feedback at one time can cause a student to shut down, guaranteeing that no further learning will take place. In such cases, consider letting go of the urge to provide all correctives necessary to make the work perfect and instead provide as much guidance as the student can reasonably act on.

Feedback Leading to Action

Recently, I accompanied my mother to doctors' appointments in preparation for a difficult surgery. She interacted positively in some situations and negatively in others, and she walked out of one appointment. When I asked her about the differences, she told me she trusts the doctors and nurses who listen to her and doesn't trust the ones who don't. Regardless of what treatment is in her best interest, she only wants to take the advice of the ones she trusts because they took information in before giving advice out.

There is a lesson here for educators. For feedback to be effective, students must act on it, and we can enhance our students' willingness to act on our feedback. By looking closely at their work to understand what they understand and identify where they need help, we are listening to our students.

"Practice doesn't make perfect; practice makes permanent. Only perfect practice makes perfect."

Our feedback can communicate to them that we have heard them, and they will be more likely to trust us enough to follow our advice for that sometimes-difficult next step.

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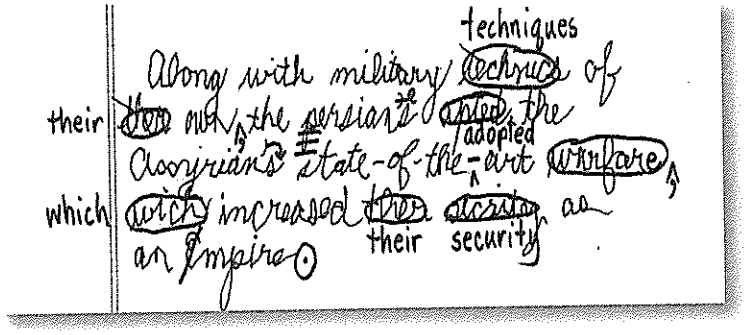
FIGURE 3. Effective and Ineffective Feedback

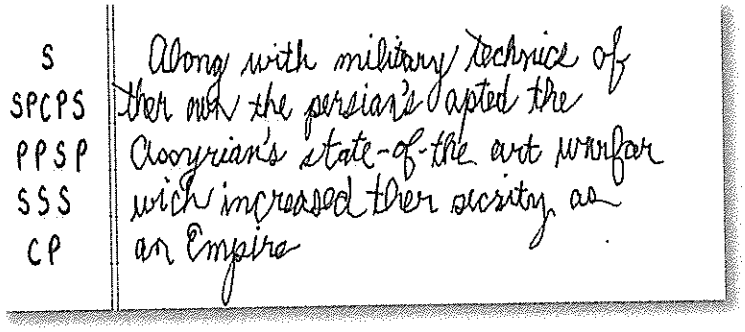
These three examples show how a teacher might provide feedback on a sentence from a 10th grade social studies paper.

Overfeedback



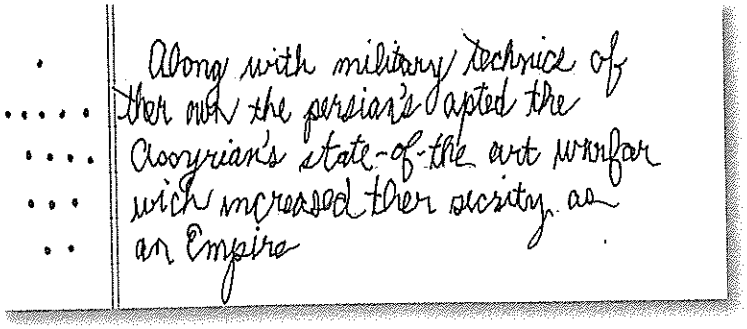
The feedback in the example above does the thinking for the student.

Feedback with Guidance



The feedback in the example above gives the student guidance on types of errors and where they appear (S = spelling, P = punctuation, C = capitalization).

Feedback That Notes Areas Needing Work



The feedback in the example above shows the student where errors appear but requires the student to determine what the errors are and how to correct them.