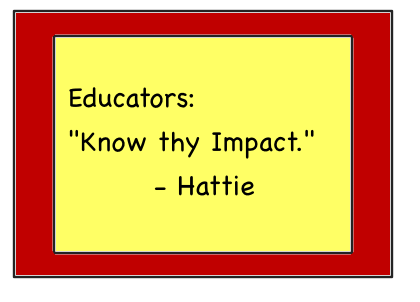
**Sample A Feedback (Purple)**

Assessment researcher John Hattie offers insightful distinctions about feedback in his article “Know thy Impact” (p.18).

He tells us to regret his enthusiastic endorsement of “dollops of feedback,” knowing now that the effects of feedback, although positive overall, can be both bad and good. To make sure that feedback is effective, teachers must know where their students are going, how they are progressing toward the goal, and where they need to go next.

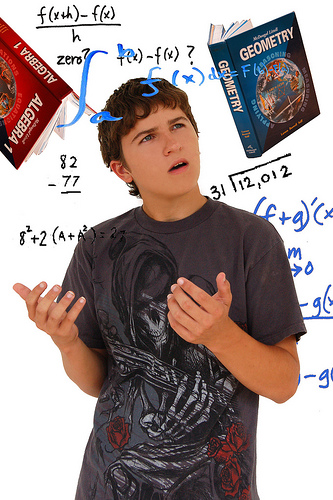
Because all messages are filtered through the students’ perceptions, what works as good feedback for one might not work for one another. Hattie describes various levels of feedback appropriate for where the learner is – whether he or she is a novice, somewhat proficient, or very competent. He also notes that listening carefully to students’ notions and providing “disconfirming feedback” may be essentials at times.





**Sample B Feedback (Blue)**

**“It’s OK – You’re just not good at math.”**

**These are the report’s major findings:**

Instructors who held a fixed theory of math intelligence more readily judged students to have low ability in math than those who held a malleable theory, which supposes that people can improve their abilities through hard work and practice.

Instructors who held a fixed theory of math intelligence were more likely to judge that a student had low ability on the basis of a single initial poor performance. They were also more likely to comfort students for their apparent lack of ability and use “kind” strategies that failed to motivate the students to improve, such as assigning less homework and not calling on them in class.

Students who received comfort-oriented feedback – as opposed to more strategy –focused feedback- assumed the instructor had low expectations for what they might accomplish as well as lower engagement in their learning, even when that feedback was expressed positively – as in, “I know you’re a talented student in general; it’s just that not everyone is a math person.” Moreover, these students had lower expectations and motivation concerning their own abilities and performance.

According to the authors, “It is not the case that instructors who believed math intelligence to be fixed failed to consider students’ best interests; instead, it appears that their fixed view of intelligence led them to express their support and encouragement in unproductive ways that ultimately backfired” (p. 716).

The authors conclude that an education system that focuses on accepting weaknesses is not as positive as intended. Rattan, Good, and Dweck, *Journal of Experimental Social Psychology*, April, 2012)

**Sample C Feedback (Pink)**

Feedback Essentials is goal-referenced; tangible and transparent; actionable; user-friendly (specific and personalized); timely; ongoing; and consistent.

***Goal-Referenced*:** “The point of this writing task is for you to make readers laugh. So, when rereading your draft or getting feedback from peers, ask, “How funny is this? Where might it be funnier?

***Tangible and Transparent:*** The best feedback is so tangible that anyone who has a goal can learn from it. Alas, feedback is opaque. A student said to her teacher at the year’s end: “Miss Jones, you kept writing this same word on my English papers all year, and I still don’t know what it is means.” What’s the word?” she asked. “Vag-oo,” he said. (The word was vague!) Wiggins recommends that all teachers videotape their own classes at least once a month. “Concepts that had been crystal clear to me when I was teaching seemed opaque and downright confusing on tape – captured also in the many quizzical looks on my students, which I had missed in the moment,” wrote one teacher.

***Actionable:*** Thus, “Good Job!” and “You did that wrong” and B+ are not feedback at all. Action feedback must also be accepted by the performer. Many so-called feedback situations lead to arguments because the givers are not sufficiently descriptive, they jump to an inference from the data instead of simply presenting the data. For example a supervisor may make the unfortunate but common mistake of stating that “many students were bored in class.” That’s a judgment, not an observation. It would have been far more useful and less debatable had the supervisor said something like, “I counted ongoing inattentive behaviors in 12 of the 25 students once the lecture was underway. The behaviors included texting under the tables, passing notes, and making eye contact with students; however, after the small group exercise began I saw such behavior in only one student.”

***User-Friendly:*** It is not of much value if the user cannot understand it or is overwhelmed by it. Highly technical feedback will seem odd and confusing to a novice. Describing a baseball swing to a 6-year old in terms of torque and other physics concepts will not likely yield a better hitter. Too much feedback is also counterproductive, better to help the performer concentrate on only one or two key elements of performance than to create a buzz of information coming in from all sides.

***Ongoing:*** Adjusting our performance depends on not only receiving feedback but also have opportunities to use it. If you play Angry Birds, Halo, Guitar Hero, or Tetris, you know that the key to substantial improvement is that the feedback is both timely and ongoing. When you fail, you immediately start over. The ability to quickly adapt one’s performance is a mark of all great achievers and problem solvers in a wide array of fields. As many little league coaches will say, “The problem is not making errors; you will all miss many balls in the field, and that’s part of learning. The problem is when you don’t learn from the errors.”

***Consistent:*** Performers can only adjust their performance successfully if the information fed back to them is stable, accurate, and trustworthy. Teachers need to look at student work together, becoming more consistent over time and formalizing their judgments in highly descriptive rubrics supported by anchor products and performances. By extension, if we want student to student feedback to be more helpful, students have to be trained to be consistent the same way we train teachers using the same exemplars and rubrics.

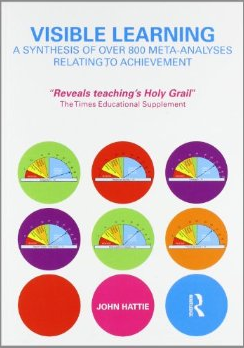
**Sample D Feedback: (Orange)**

Many years ago, I made a claim about the importance of giving students “dollops of feedback (1999)”. This endorsement of giving great amounts of feedback was based on the finding that feedback is among the most powerful influences on how people learn. This evidence comes from many sources.

My synthesis of more than 800 meta-analyses (2009, 2012) shows that feedback has one of the highest effects on student learning. These meta-analyses focused on many different influences on learning – home, school, teacher, and curriculum – and were based on more than 50,000 individual studies, comprising more than 200 million students, from 4 to 20 year olds, across all subjects.

As an education researcher, I was seeking the underlying story about what separated those influences that had a greater effect on student learning from those that had a below-average effect. Feedback was a common denominator in many of the top influences.

Moreover, Dylan Wiliam (2011) has argued that feedback can double the rate of learning, and an increasing number of scholars are researching this important notion (see Sutton, Hornsey, and Douglas, 2012). (Hattie, *Educational Leadership*, Sept. 2012).





**Sample E Feedback (Green)**

**Three Levels of Feedback:**

***Task Feedback******–* *Novice:*** Your learning goal was to structure your account in a way that the first action you described was the first thing you did. Then you were to write about the other things you did in the same order in which they happened. You did write the first thing first- but after that it becomes muddled. You need to go through what you’ve written and number the order in which events happened and then rewrite them in that order.

***Process Feedback: Almost Proficient***

You’re stuck on this word, and you’ve looked at me instead of trying to work it out. Can you see why you may have gotten it wrong? Perhaps you could sounds out the word, look it up on your tablet, or infer its meaning from the other words in the paragraph.

***Self-Regulation Feedback: Competent***

I’m impressed you went back to the beginning of the sentence when you became stuck on this word. But in this case, this strategy didn’t help. What else could you do? When you decide on what the word means, tell me how and why you know.

In addition to maximizing feedback at the appropriate level, teaches also need to be attentive to moving the student forward from mastery of content to mastery of strategies to mastery of conceptual understandings. For this to occur, teachers need to give students feedback that is at and just above their current level of learning.



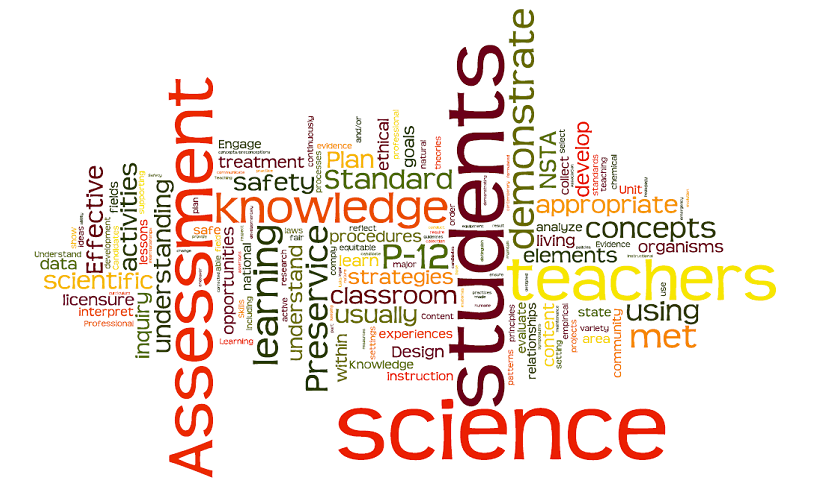


**Sample F Feedback (Yellow)**

When Feedback Sparkles – A 9th grade physical science teacher wanted her students to learn how varying conditions affect projectile motion. For a performance of understanding, she asked students to predict the effects of four projectile characteristics on three characteristics of the projectile’s motion. In groups, students wrote a statement about how they predicted each of the four characteristics would affect the three aspects of motion and explained their reasoning.

The next learning target was that students would be able to assess the accuracy of their predictions and reasoning. Her feedback was not about lab report format or “correctness” of conclusion, but about the observations and reasoning. The feedback was not “giving away answers” but rather pushing students to learn more. For example, on one student’s report she noted, “A larger diameter should have a shorter range, distance, and hang time than a smaller diameter when air resistance is present. How can you show this?” Students then had an opportunity to revise their lab reports before handing them in for a final grade (Brookhart, Susan M., *Educational Leadership*, Sept. 2012).





**Sample G Feedback (Red)**



First, teachers must establish the classroom as a safe place for making mistakes. As Alina Tugend (2011) shows in her book *Better by Mistake: The Unexpected Benefits of Being Wrong*, the best learners fail often.

Second, and related to this, teachers who use feedback effectively convey the idea that smart is not something you just are; it’s something you can become. In this regard, the most important word in a teacher’s vocabulary is “yet.” When a student says “I can’t do this,” the teacher adds, “yet.”

Emphasize the idea that although some students may need more support than others, all students can succeed. The research also suggests that the most effective feedback focuses on the task at hand rather than the recipient’s ego. One high school English teacher writes comments about students’ essays on strips of paper, rather than on the students’ notebooks. The next day, each group of four students receives back their four essays and the four strips of paper, and the students’ task is to match the comments to the essays. The ego involvement is minimized as students read and reflect on the comments before they know whose paper the comments refer to.

Focus on things that are within the recipient’s control. Telling a student to “be more systematic” is likely to be no more helpful than telling an aspiring basketball player to be taller on an unsuccessful comedian to be funnier. Feedback can be true, but useless.

Requires more work from the recipient than from the giver. If feedback highlights everything that is wrong in a piece of work, there’s nothing left for the recipient to do. If a student has solved a number of equations, some correctly and some incorrectly, the teacher could say, “Five of these are incorrect. Your challenge is to find them and fix them.” For students who have solved all of the equations correctly, the teacher could say, “Make up three equations for others to solve; one harder, one at about the same level, and one easier than the ones you’ve just solved.”

Because classrooms are much more complex than thermostats, you cannot give good feedback without understanding your students, their experiences with current and previous teachers, their attitudes about the subjects they are studying, and how they perceive you. This complexity means that the key to effective feedback is the judgment and creativity of teachers (Wiliam, Dylan, Feedback Part of a System, *Educational Leadership*, Sept. 2012.)