


The Role of Teacher Feedback

Much has been written on the effect that teacher feedback plays in student achievement. In a recent synthesis of more than 800 meta-analyses, Hattie (2012) found that feedback had a significant influence on student achievement ($d = 0.72$). In a differentiated classroom, where teachers are always striving to challenge all students to stretch from their starting points, feedback that fosters growth is especially important.

What Is the Role of the Teacher in Feedback?

Effective teachers aim to provide feedback relative to three important questions: Where am I going?, How am I going there?, and Where to next? (Hattie, 2012).

Teachers need to answer those questions in relation to student tasks, processes, and self-regulation.

Levels		Major questions		Three feedback questions
1	Task	How well has the task been performed; is it correct or incorrect?		Where am I going? What are my goals?
2	Process	What are the strategies needed to perform the task; are there alternative strategies that can be used?		How am I going there? What progress is being made toward the goal?
3	Self-regulation	What is the conditional understanding needed to know what you are doing? Self-monitoring, directing the processes and tasks		Where to next? What activities need to be undertaken next to make better progress?

In a differentiated classroom, students learn and grow when they tackle work that is a bit beyond their capacity to complete independently. The job of the teacher is to first ensure that work undertaken by the individual student is slightly beyond the student’s reach and then ensure the presence of support systems to guide the student to success. Through accurate and timely feedback, teachers can encourage an environment that supports a growth mind-set.

The Role of Mind-set

Carol Dweck (2006) talks about mind-set as a view that people adopt and assert about their personal qualities and abilities—a view that can profoundly affect the way that people lead their lives. In her research, Dweck discovered that people adopt one of two views: a fixed mind-set or a growth mind-set. People who believe that their qualities are carved in stone—and can never change no matter what they do—have adopted a fixed mind-set. Others who believe that their qualities can be cultivated through their efforts have adopted a growth mind-set.

The table below illustrates what the fixed and growth mind-sets may sound like:

What might a fixed mind-set sound like?	What might a growth mind-set sound like?
<ul style="list-style-type: none"> • I am born with a particular intelligence level. • I am worried about what others will think. • I would rather look good no matter what the cost. • I don’t want to take risks. • I can’t change who I am. 	<ul style="list-style-type: none"> • I can always be growing and learning. • I can learn something from failure. • I want to try new things. • Success or failure does not define me. • I want to keep asking questions.

Students who have a fixed mind-set have determined that they are powerless over their ability to grow. Students who have a growth mind-set are encouraged by reflection and are determined to keep growing. Dweck states that the effect of a fixed mind-set over time can lead to underperformance, opting out, feelings of loss of control, and even academic dishonesty.

Teachers with the fixed mind-set may underestimate student capacity and motivation to work hard and may “teach down” based on student’s language, culture, socioeconomic status, race, and other characteristics. Even when teaching students with high ability, they may accept their high grades or grade-level work as adequate.

On the other hand, teachers with a growth mind-set encourage and insist on student effort and hard work—and, over time, they are able to change the mind-set of students by creating the conditions in which students can experience success through hard work (Tomlinson & Imbeau, 2010).

Growth Mind-set and Differentiation

According to Carol Ann Tomlinson and Marcia B. Imbeau (2010), “differentiation is a growth mind-set endeavor—it asks teachers to find an academic entry point relative to essential learning outcomes, to make instructional plans designed to move students to mastery of those outcomes, and to adopt a ‘whatever it takes’ approach in doing so. It also calls on teachers to work with students to show them the direct link between effort and success” (p. 33).

For More Information

- Watch Carol Dweck explain her research in a series of video segments:
www.brainology.us/webnav/dr-dweck-interviews.aspx.
- Read or listen to the article “Students’ view of intelligence can help grades” by Michelle Trudeau:
www.npr.org/templates/story/story.php?storyId=7406521.

The importance of mind-set in differentiation cannot be underestimated. Simply put, the teacher’s mind-set influences all aspects of the classroom system: the learning environment, curriculum, assessment, instruction, and leadership and flexible classroom management—the five nonnegotiables of differentiated instruction.

The following table represents all five nonnegotiables of DI and shows how they look like in an effectively differentiated classroom.

Learn more about five nonnegotiables of differentiated instruction in the PD Online® series, available at <http://pdo.ascd.org/catalog/browsecatalog.aspx>.

Nonnegotiable of DI	What It Looks Like in an Effectively Differentiated Classroom
Learning environment	Individual differences are accepted as natural and positive. The teacher respects and supports the possibilities inherent in each student.
	Physical arrangements are flexible and support student access to a variety of learning options.
	The teacher is attuned and responsive to the affective, cognitive, and physical needs of learners.
	Students feel safe, both physically and emotionally.
	Hard work is an expectation.
Curriculum	Student interest, abilities, backgrounds, and learning preferences help shape curriculum.
	Students work with the essential knowledge, understanding, and skills in a lesson and unit of study.
	Multiple perspectives on ideas and events are sought.
	Students are expected to think, and be supported as thinkers, as they engage with curriculum.

Assessment	Diagnostic pre-assessment is typical and is used to determine individual students' entry points into a unit of study in terms of their readiness, interest, and learning profiles—and to plan for student variance.
	Clearly established criteria are used to help support student success.
	Students are evaluated in multiple ways, with emphasis on personal growth.
	Formative assessments measure students' readiness, interest, and learning profiles. This process is essential to planning for and supporting student variance.
	Summative assessments can vary in modes of expression and types of scaffolding in terms of language, time allocation, writing, etc.).
Instruction	Instruction aligns with essential knowledge, understanding, and skills and is planned based on assessment data.
	The teacher helps students develop multiple ways of making sense of ideas, focusing on helping students develop self-efficacy and independence as learners.
	Instruction is flexible in terms of time, materials, support systems, student groupings, instructional modes, and teaching and learning strategies.
	Collaborative learning is one of many key tools.
	Flexible student grouping capitalizes on student strengths and allows effective attention to student weaknesses.
	Students work with respectful tasks—tasks that are equally interesting and engaging, and that promote understanding of, and the ability to apply, essential content.
Leadership and flexible classroom management	The teacher and students share in the decision-making process about daily routines and classroom operation.
	A range of resources is available and supports student access to content.
	Classroom routines balance student needs for guidance and freedom.
	Variable pacing is standard. Time use is flexible in response to student needs.
	The teacher is primarily a coordinator of time, space, and activities rather than primarily a provider of information.

Sources: Tomlinson, C.A., & Imbeau, M. B. (2010). *Leading and managing a differentiated classroom*. Alexandria, VA: ASCD. Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: ASCD.

Fostering Growth Mind-set Through Teacher Feedback

To effectively differentiate instruction, it's important to foster the growth mind-set among students—to show them the relationship between effort and success and to explain the importance of growing and embracing challenges in school, and in life. It's even more important to provide the type of feedback that cultivates the growth mind-set in students.

Below are a few suggestions on what teachers can do to help students develop the growth mind-set:

1. Avoid telling kids they are smart; instead, give praise for persistence and hard work.

Teachers might catch themselves saying, “Wow! You guys did that so fast; you are so smart.” The underlying message is: Smart kids do things fast, so if you are not fast, you are not smart. Students with a fixed mind-set will be happy to be told that they are smart, but this kind of praise will not encourage them to work hard. When the praise is given in relation to something they think is innate, it speaks to what they *are*, not what they *do*. To avoid this sense of passivity, try to be specific with your feedback, and speak to particular actions that students have taken. Using rubrics that are clear about the assignment expectations can send the message to students that anyone can meet the expectations if they *do* things correctly: That effort is what is valued in the classroom. Although grades can be used to assess students' achievements, we can also reflect on a student's habits of mind, as well as progress. (See Fig. 1.)

Rubrics can help teachers provide praise that is related specifically to a student's hard work. If you are new to creating rubrics, Rubistar (www.rubistar.com) offers some great templates to get you started. Another resource for providing growth-minded feedback is *Developing and Assessing Differentiated Student Products* by Roberts and Inman (2009).

2. Use every opportunity to assess for growth.

Students need to begin to see that growth is attainable—that, with hard work, they can be whatever they want to be. Teachers can help students begin to see this by making ongoing assessment a natural part of their lessons. Using an “exit ticket” on the way out the door can help teachers see where students are with the topic and help students reflect on their own growth. One such example might be asking them to do a 3-2-1 card: 3 things they have learned about the topic today; 2 questions they still have; and, finally, 1 big idea they connected with in the lesson. Through reflection, students can begin to practice the growth mind-set orientation.

Here are some additional examples:

“Just-in-time feedback”

Turn the first five minutes of class into prime learning time by using “bell ringer” activities to check in on student understanding. These quick warm-ups require little or no explanation; students do them as soon as they arrive in class.

Bonny Bowen, a middle school social studies teacher from Plainwell, Michigan, explains how she connects bell ringers to big ideas in a narrated slideshow on the

Fig. 1. Elementary Example of a Daily Report Card

Ask Yourself: Was I an EXTRAORDINARY learner today?					
4 = X Factor, 3 = Extraordinary, 2 = Getting by, 1 = You're Out					
	M	T	W	Th	F
1. Did I make good choices?					
2. Did I always do my personal best?					
3. Did I listen carefully in class?					
4. Did I finish everything?					
5. Was I in charge of myself?					
6. Did I solve problems peacefully?					
7. Did I get started and stay focused?					
8. Did I say “I can” instead of “I can't”?					
9. Did I give appreciation to others?					
10. Did I work well with others?					

Doing What Works website

(<http://dww.ed.gov/media/CL/OIS/SL/See/flashlite/549/index.htm>). Bowen says her goal is to “get more kids every day to be closer to the real meaning of whatever concept we’re working on.” She sees a boost in student confidence from quick activities that help students realize where they need to be. She also quickly finds out who’s struggling or behind, so she can step in with extra support.

“Ticket out”

At the end of the day, try the “ticket out the door,” or exit-card method, to encourage students to reflect on their learning. Mix up the questions to avoid rote answers. One day, you might use an exit card to check on team progress. On another, you might ask a content question to find out if anyone’s struggling with key concepts. Students’ answers will prompt the topics for your upcoming mini-lessons.

3. Highlighting everyone’s valuable contribution

Classrooms that support a growth mind-set find value in collaborating with others. This may involve more problem-based learning or complex tasks. Some teachers find that the “Jigsaw” strategy, originally invented by psychologist Elliot Aronson in 1971, leads to more collaboration in class. In a Jigsaw activity, the class is divided into groups of four to six students forming their “home” group, each of which is given a task to complete. They then meet in “expert” groups to complete a task with other experts from other groups. After researching or completing their task, they return to their home groups and share what they have learned as the experts.

Although this strategy was originally created to help with bridging cultural differences between groups of students, it can be a tool in the classroom to help students work together more productively. Along with providing opportunities to participate in valuable group work, students can also begin to reflect upon their own contribution through self-evaluative rubrics. This begins to help all students see themselves as a part of the success of the classroom. (See Fig. 2 for an example.)

4. Treating mistakes as a part of the learning process

Few of us are willing to take risks if we know we will be criticized or shamed for making a mistake. However, when teachers view mistakes as part of the learning process and a way to understand more about a child's thinking, children learn

Fig. 2. Student Self-Evaluation for Contributions to Group Work (Tomlinson, 2003)

Students: Task: Date:			
	Excellent	Good	Not Helpful
I helped the group be clear about the task for working effectively.			
I helped the group develop a plan for working effectively.			
I used specific knowledge, understanding, and skill to contribute to the group's solution to the problem.			
I contributed directly to successful completion of the work.			
I listened carefully to the ideas and suggestions of others.			
I used time wisely during the work.			
I used resources appropriately during the work.			
I contributed to improving the quality of early ideas and plans.			
I helped solve problems the group had while we worked.			

that the classroom is a safe place to take risks. In this environment, students are not afraid to volunteer their ideas, even when they are unsure of an answer.

There are many ways to handle a wrong answer in a positive manner. For example, suppose a teacher asks Sally how many tens are in 54, and Sally replies, “Four.” The teacher can respond in a variety of supportive ways:

- “Did you mean there are four tens or four left over? Take another look.”
- “That’s part of the answer. Show me how you decided on four.”
- “You’re on your way to the answer. Would you like to try again on your own or have someone work with you?”

These responses show that the teacher respects the student’s thinking and is willing to offer a way for the child to continue working on the problem. When children engage in social problem solving and the solution they agreed to try doesn’t work, the teacher can help them view it as a learning experience. Some solutions work well in one situation and not in another. Ask, “What can you do now?” or “What else could you do?” The ability to switch to an alternative solution builds perseverance. It is also one of the characteristics of a socially adept child.

What Is the Effect of Teacher Feedback Over Time?

Research studies and experience confirm that when teachers convey high expectations, children are more likely to be successful. This applies to promoting children’s social skills, as well as their academic success.

Teachers have countless opportunities to make comments or ask questions that help children see themselves as competent learners. For example, a child who may have had a particularly frustrating time during one part of the day can be given a chance to succeed at something else later. Or the student who was frustrated by an art project in the morning might be invited to share his story with the class during writing time in the

afternoon. These approaches help children begin to see that their teacher seeks to find and celebrate the strengths in everyone.

It's also important that teachers make it clear to the students that they fully expect them to be cooperative and caring with one another. This message can be reinforced in the following ways:

- **Acknowledge what children do:** “Thank you for helping Sloan clean out the guinea pig cage. After the long weekend, it was too big a job for one person.”
- **State rules positively** to give a clear message of what behavior is expected. For example, say, “Be a friend” rather than, “No fighting.”
- **Validate children’s best intentions** so they view themselves as people who have positive social skills. Statements such as “You’re the kind of person who likes to help others” or “It’s just like you to be generous” will help make children feel competent and have positive interactions in the classroom.

Encouraging students in this way will help build a classroom that supports a growth-oriented mind-set and provide a safe and respectful classroom where all students see themselves as integral members of their class.