Better Feedback in the Math Classroom



ABOUT THIS RESOURCE

Effective feedback is an essential component of the learning process, moving students forward in their learning by helping them understand their progress and recognize areas for improvement. Effective feedback is constructive, with a goal beyond grades, fostering student growth and engagement.

No matter the science discipline or assignment, effective feedback has certain characteristics: it is specific, actionable and timely, focused on improvement, and encourages self-assessment with a growth mindset.

HOW TO USE THIS RESOURCE

This resource includes three sections: an overview, exercise, and feedback printable.

OVERVIEW

In this <u>overview</u>, each of the six characteristics of effective feedback is followed by an explanation and examples of how to reframe less effective feedback to make it more effective. The six characteristics are also linked below:

- 1. <u>Be Specific</u>
- 2. Focus on Improvement
- 3. Encourage Self-Assessment

- 4. Encourage a Growth Mindset
- 5. Make it Actionable
- 6. <u>Be Timely</u>

EXERCISE

In the <u>exercise</u> that follows, brainstorm how to apply these concepts in your own classroom. How might you reframe the verbal or written feedback that you provide? How can you adapt or improve your current practices? What support do you need to implement effective feedback routines in your classroom?

PRINTABLE

Print a <u>copy of this infographic</u> and post it in your classroom as a reference and reminder.

OVERVIEW

Be Specific

Avoid generic phrases. Instead, provide specific feedback that highlights the strengths of the student's work and areas for improvement. Offer concrete examples as much as possible.

Instead of this	Try this
"You got some right! Nice try."	"Your work here shows me that you really understand adding and subtracting like terms. But remember to use the FOIL method when multiplying two binomials (i.e. [x + 9][x - 1])."

Focus on Improvement Keep the focus of your feedback on what can be improved, rather than solely pointing out errors. Giving constructive feedback allows students to recognize opportunities to move forward with their work.	
	"Practice problems 1 and 2 show that you've already grown in your

Encourage Self-Assessment

Use your feedback as a platform for fostering self-reflection. Where possible, incorporate questions that prompt students to evaluate their progress and derive their own assessment of their work. (Help students learn how to move forward when they receive feedback with our <u>Feedforward Strategies</u> resource.)

Instead of this	Try this
"Come see me."	"Look back at your notes on the three methods for solving quadratic equations. You tried factoring: did it work? If it didn't, what method should you try next?"

Encourage a Growth Mindset

Frame your feedback as a tool for growth rather than only evaluation. Incorporate specific examples where the student has demonstrated progress or improvement. (Help your students evaluate their mindsets with our Four Corners Growth Mindset Evaluation.)

Instead of this	Try this
"You need to try harder."	"You have really been persevering when solving challenging problems. Instead of stopping when one strategy doesn't work, I've seen you try a second strategy. Keep it up! Everyone has to try multiple strategies sometimes. And if you find that the second strategy doesn't work either, it's okay to have to shift to a third strategy."

	Make it Actionable
Provide actionable suggestions that provide clear guidance for students on how to improve their work. Break down your feedback into specific steps or strategies that students can use so they will have a clear understanding of what you are asking them to do.	
Instead of this	Try this
"Don't leave any problems blank."	"If you run into a challenging problem, remember your steps for success and start with step 1: figure out what the problem is asking. Once you've done that, keep going step by step. For each problem, try to complete at least steps 1 and 2."

	BeTimely
	ity feedback to students as soon as possible. Ensure that students receive they move on to another assignment requiring the same skills.
Instead of this	Try this
Waiting for a test to provide feedback.	Build in frequent checks for understanding and provide feedback on formative tasks using exit tickets or large group practice with clickers, whiteboards, or other student response systems. Then, use student responses to hold individual conferences with students or create groups and provide targeted, specific feedback.

EXERCISE

Be Specific	
What does it mean?	What could it look like in my classroom?
Avoid generic phrases such as 'Good job!' or 'Follow Directions.' Instead, provide specific feedback that highlights the strengths of the student's work and areas for improvement. Offer concrete examples as much as possible.	

Focus on Improvement	
What does it mean? What could it look like in my classroo	
Keep the focus of your feedback on what can be improved, rather than solely pointing out errors. Giving constructive feedback allows students to recognize opportunities to move forward with their work.	

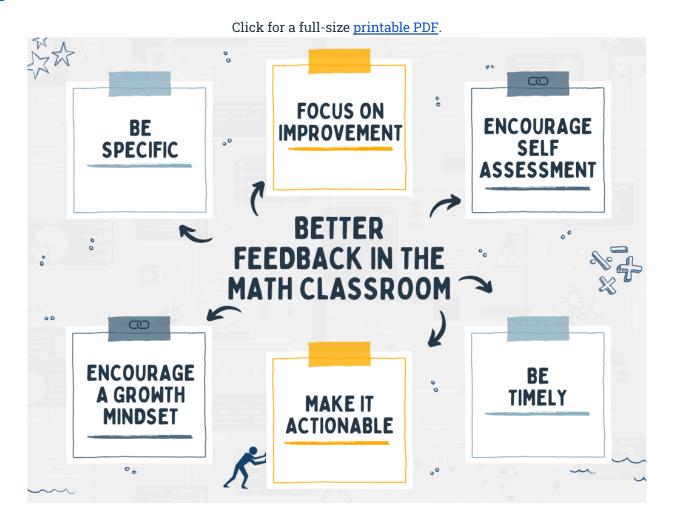
Encourage Self- Assessment	
What does it mean?What could it look like in my classroom	
Utilize your feedback as a platform for fostering self-reflection. Where possible, incorporate questions that prompt students to evaluate their progress and derive their own assessment of their work. Help students learn how to move forward when they receive feedback with our <u>Feedforward</u> <u>Strategies</u> resource.	

Encourage a Growth Mindset	
What does it mean?	What could it look like in my classroom?
Frame your feedback as a tool for growth rather than only evaluation. Be sure to incorporate specific examples where the student has demonstrated progress or improvement. Help your students evaluate their mindsets while engaging with new knowledge, one another and you with our Four Corners Growth Mindset Evaluation.	

Make it Actionable	
What does it mean?	What could it look like in my classroom?
Provide actionable suggestions that provide clear guidance for students on how to improve their work. Break down your feedback into specific steps or strategies that students can use so they will have a clear understanding of what you are asking them to do.	

BeTimely			
What does it mean? What could it look like in my classroo		What does it mean?	What could it look like in my classroom?
Provide timely, high-quality feedback to students as soon as possible. Ensure that students receive feedback before they move on to another assignment requiring the same skills. This will ensure that students can incorporate feedback into their learning process and make necessary improvements on new work.			

PRINTABLE



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